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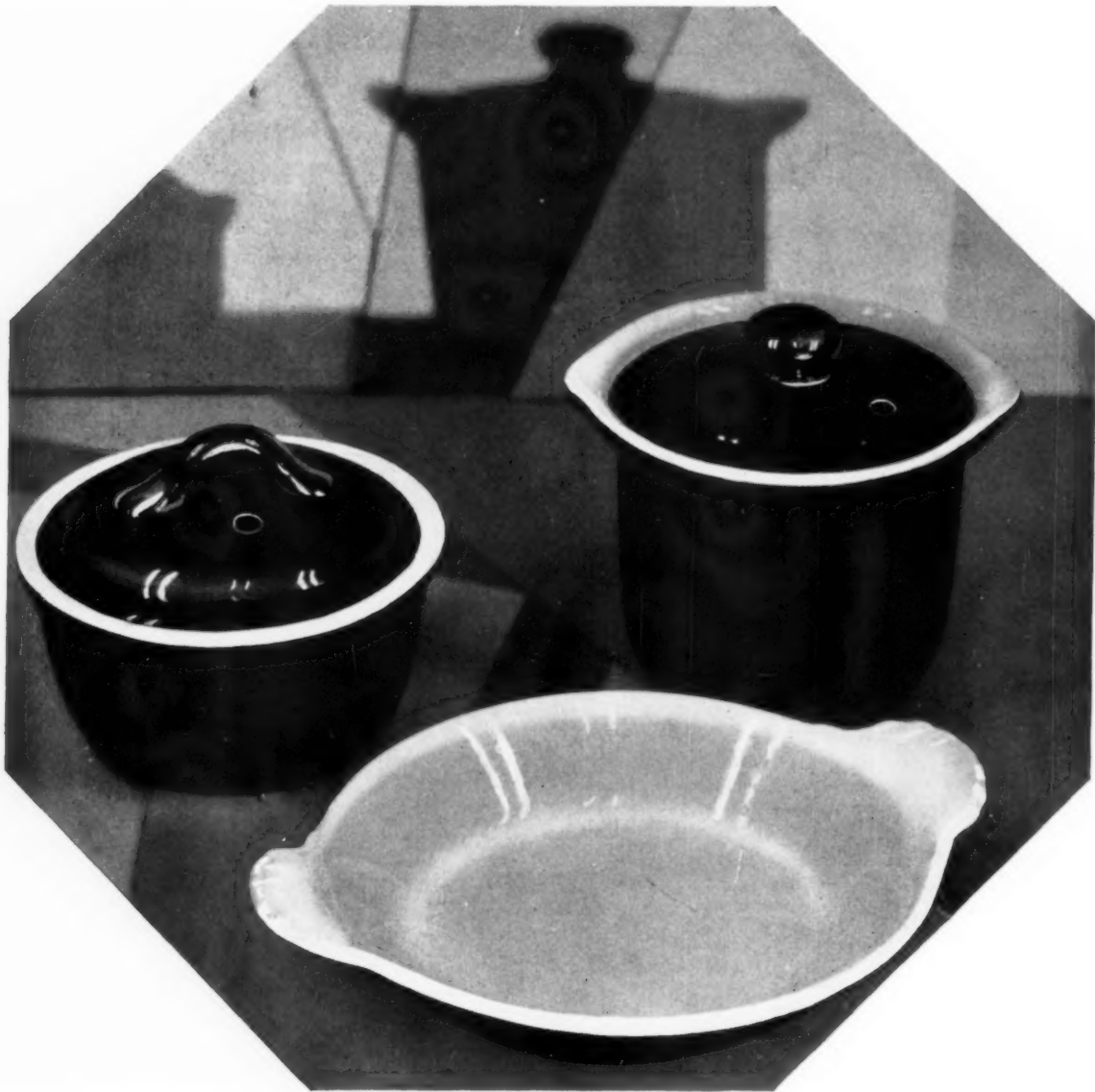
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THE MODERN HOSPITAL



A Monthly Journal Devoted to the Construction, Equipment, Administration and Maintenance of Hospitals and Sanatoriums.

VOL. XXXVII

August, 1931

NUMBER 2

How Doctors' Extravagances Affect Hospital Costs

By GEORGE EDWARD FOLLANSBEE, M.D., F.A.C.S.

Cleveland

IF THIS discussion of the factors entering into the increased per capita cost of caring for patients in hospitals were merely explanatory with no effort made to offer constructive or corrective criticism, or if it were merely abusive with no attempt to offer practical suggestions, the time occupied would be wasted and might better be used in other directions. My endeavor will be, therefore, not only to point out some factors connected with the professional work in the hospital that are needlessly increasing the cost but also to suggest some means of bringing about a correction of them.

Such factors have come under my notice as a professional man with many years of experience in a hospital where economy is necessary and is considered only secondary to high grade professional work. I leave to others the discussion of such elements of increased cost as are not due to the care of the patient and the direction of the professional work. I am not a hospital administrator but simply an observant doctor with an affectionate interest in the welfare of my hospital.

Although a hospital is primarily an institution devoted to the purpose of caring for the various afflictions of mankind, it must be kept in mind that there are other functions, such as training nurses and interns, educating medical students

and fostering research, all of which may modify in varying degrees the factors that enter into the increased cost and make them justifiable in some hospitals while the same factors would be unjustifiable in others. It is evident, then, that there is no blanket criticism that can cover all hospitals. Each one must be judged on its merits. The small community hospital with no training school for nurses and no intern staff should have a lower per capita expense than a university teaching hospital. But as per capita costs are directly related to the cost to the pay patient, it is proper to consider how much of the cost directly due to the type of hospital under consideration is properly chargeable on the patient's bill. I leave that question to the economists to settle.

Before getting down to the particular subjects I wish to cover, it will be well to bear in mind two basic facts: (1) The more capital expenditure required to build and furnish a hospital of a given number of beds, the more will be the maintenance and the higher will be the per capita cost. Hospitals are like automobiles in this respect. (2) The more funds available to cover the deficit of operation the larger will be the deficit and the higher the per capita cost. "Easy come, easy go" is a failing of human nature. This failing, however, is not peculiar to the board of trustees and the

superintendent. It permeates the whole operating force down to the elevator operator. The professional staff is neither better nor worse than the rest. The professional care of the patient, exclusive of nursing, laboratories, x-ray and operating room services, drugs and dressings, physiotherapy and house doctor expense, will vary in different hospitals but it probably averages about 25 per cent of the total per capita expense. Nursing, of which I am not competent to speak critically, approximates 20 per cent. (I am assuming that capital charges are not included, only maintenance and operation.)

What Increased Service Entails

The cost of hospital care has risen in the last ten or fifteen years. So has the general standard of living. The hospital has always given the best to be had in the light of professional development. But what a development has taken place in that time! Would the poorest patient or the one most critical of hospital costs be satisfied with the facilities of ten or fifteen years ago even at the charges of that time? Increased service means increased cost, but on the other hand it also means shortened hospitalization, better results and more lives saved.

There are, however, savings that can be made in the professional care without harm to the patient. They may not be large and they may not be impressive when the percentage of the professional care to the total per capita cost is considered, but every little helps and the total for a year may be considerable. Without giving offense I should like to call the objects of my criticism, extravagances. The first may be called extravagances of the visiting doctors.

There are times when all the diagnostic facilities of a hospital and the acumen of its staff are insufficient to make a diagnosis. But there are other times when the diagnosis is so evident that expensive diagnostic procedure can merely be confirmative of what is already known. It is therefore an extravagance, an unnecessary cost. An instance would be the taking of an x-ray picture on a perfectly evident Colles fracture, followed by a fluoroscopic reduction and another picture immediately subsequent to show the position. This is quite an ordinary procedure. The first picture at least is unnecessary and frequently the second one. Another instance would be daily blood chemistries sometimes carried out long past the need for such frequent examinations. A patient suffering from typical gall stone colic with a history of repeated attacks but otherwise normal on physical examination needs no intravenous dye x-ray examination to make a proper diagnosis. Other examples

could be cited. The actual expense in each separate unnecessary examination is not large and the hyperconscientious attendant may justify himself by saying that one cannot be too sure, but to me that same degree of conscientiousness would require the personal observation of the patient by the attendant much more frequently than he seems to find necessary. Perhaps he distrusts his own art in the practice of medicine and depends only on science.

Interns are to be taught. They come to the hospital and give their services, in return for which they have a right to be taught all a hospital can teach. That excuse is valid if the intern learns, but it is questionable whether he would not learn more and be more self-reliant if the scientific accuracy of the laboratory were displaced in the cases mentioned by the more time consuming teaching of the art of history taking and physical examining and the conclusions to be reached thereby.

The precepts of the American College of Surgeons in respect to hospital records have had much to do with the particular extravagance of which I am speaking. I am a thorough believer in records in the proper conduct of a hospital. But I believe in records for the sake of good care of the patient, not for the sake of records themselves. I would rather choose my hospital on the honesty and ability of its personnel than on the number of laboratory examinations made or x-rays taken per patient.

Scientific enthusiasm is a laudable quality in any member of a hospital staff but it is not conducive to economy. The "interesting case" is an invitation to use all known tests applicable to it as a check against the reported findings of others. Their repetition during the hospital stay and their agreement with expected results are sources of intense satisfaction which find their greatest justification in raising the morale of all those connected with them. Perhaps the expense is thus justified but it could hardly be justified on other grounds.

Costs: Justified and Otherwise

Following the lead of the real scientific enthusiast is the occasional attendant whose smattering knowledge of the science of medicine is sufficient for him to know that certain tests and examinations are made in certain cases under his care although their implications may be beyond his comprehension. His desire to appear learned by ordering such tests is expensive to the patient if the charges are paid and contributes one item to the unjustified increased per capita cost.

Research activities add to laboratory costs but

if they are carried out in a teaching hospital or conducted by a qualified investigator and the lesson learned is given publicity to the extent of its value, the temporary increase in the per capita cost is creditable to the hospital, for knowledge must be gained and made available to others.

Unnecessarily Costly Treatments

The multiplicity of patented, copyrighted and proprietary remedies has well-nigh driven pharmacology out of the field of treatment. These types of remedies come and go as fashion dictates or as the efforts of detail men or the effectiveness of advertising prevail. Although the lives of almost all of these remedies are comparatively short, one feature of all of them remains constant. They are expensive. There are few of them that cannot be displaced with much cheaper but equally effective remedies if the doctor knows his pharmacology. There is a widespread ignorance on the part of the attending physician that special diets increase costs and many times the nature of the ailment or the condition of the patient does not demand them. They then become another extravagance unwittingly incorporated into the per capita cost by the thoughtlessness of the physician.

There are certain extravagances chargeable to the house staff in hospitals employing them. The interns ordinarily do the dressings and the routine prescribing. They might very profitably, both to themselves and to the hospital, be taught economy in the use of gauze, bandages and adhesive plaster. They might also very profitably to the patient as well as the hospital and themselves be taught the expensive viciousness of the routine prescription of costly hypnotics and sedatives night after night. Simply a patient's request for a sleeping tablet should never be sufficient reason for the giving of a hypnotic. Although the commonly used barbitol and similar hypnotics are not habit forming drugs, there is such a thing as forming a habit of not sleeping without them. All these drugs are expensive and the sum total of the cost of the worse than extravagant prescribing of them is a tidy sum in the hospital's monthly bills payable. If each patient who thought he (or usually it is she) could not sleep without the assistance of some drug, were given plain chloral hydrate or combined with potassium bromide in water, the old-time stand-by, there would be fewer patients demanding "something to make them sleep." What was said about the attending physician concerning the prescribing of proprietary and patented remedies applies even more to the house staff for the simple reason that the house staff does more of the prescribing.

There is a deplorable waste of dressings, par-

ticularly on the accident service of most hospitals. I have yet to see an intern start with a ten-yard bandage and fail to use all of it, unless he has been called to account. Interns may receive adequate instructions in bandaging before they enter a hospital but the evidences of such instructions are singularly lacking in most of their work. As a consequence, layer after layer of bandage is applied in the endeavor to make a dressing stay in place. The intern is even then doubtful of the security and proceeds to wind the part with adhesive plaster. The result is ordinarily a failure, for the following day the dressing is usually loose and misplaced. Half of the amount of bandage ordinarily used if properly applied will hold a dressing in place better than twice the amount improperly applied. Adhesive plaster is useful for holding dressings and bandages in place and sometimes is necessary, but compared to the amount ordinarily used very little is necessary if it is properly placed. The rest is wanton waste.

There is less waste of gauze and cotton since hospitals have learned to sterilize them in small packages, although small packages may in themselves be a waste if the area to be dressed is large. In the case of abdominal pads the intern cannot be blamed if the hospital supplies him only large ones to dress small clean wounds or if he has to apply an adult sized pad to a child. There would be economy in supplying at least two sizes and preferably three, marked so that the proper size could be selected before the package was opened.

Reducing Costs in Prescribing

What has been said of the in-patient is equally applicable to the out-patient department of a hospital. Of all the extravagances I have mentioned I believe there is but one other, which can be corrected by a change in hospital routine. In addition to the culpable routine prescribing of expensive physics, sedatives and hypnotics, both visiting and house physicians are inclined to prescribe proprietary preparations when official remedies might be used quite as well. There are various reasons for this habit. The prescription of proprietaries is so common when mixtures are desired that doctors have forgotten how to combine drugs in proper dosage in a palatable form. The therapeutic uses of many drugs have been neglected so long that knowledge of them is hazy and they do not readily come to mind. It is easier and quicker to write for a proprietary than to formulate and write a doctor's prescription.

There are some conditions that can very well be handled routinely by stock prescriptions made up by the hospital druggist, or in the absence of a druggist purchased in bulk from a manufacturing

or wholesaling house. A hospital staff could easily prepare a set of formulas that would answer its purpose. These could be designated by numbers and this would make prescription writing short and simple. Shopping around for some of the more expensive drugs for which there is no substitute will probably reveal sources of supply at less expense. The total drug bill of the average hospital is easily double what it should be under careful and economical buying and prescribing.

Other Reducible Extravagances

There are many factors that enter into the increased per capita cost other than those I have mentioned. Hospital administrators know what they are. Some are in capital expenditures, some are in administration. Some are correctable to a degree. Others are not, although I once heard an economist say he never saw a budget that could not be cut 10 per cent. I have chosen to speak only of those costs connected with the professional care of the patient which seem to me to be amenable to correction to a greater or lesser extent. It is easier to point out defects than to correct them, but defects can be corrected if the determination to correct them is present. It is a matter of organization and personnel. Organization alone will not do it, nor will personnel. The best paper plan of organization is useless without proper personnel. Between the two I would choose personnel. But when a practical efficient organization works together with the proper personnel the problem must be difficult indeed that cannot be solved. What is called teamwork in football will correct many defects that otherwise could not be reached. Teamwork is dependent upon the personality of one leader. A person imbued with a spirit of generosity, enthusiasm, determination, patience, fairness and, above all else, tact, can develop teamwork that will do wonders in any institution.

In a hospital such a person may be either a layman or a professional man. If he has the desired qualities, he will attract the various divisions engaged in hospital work and establish one well functioning machine. Kindness, justice and appreciation are the lubricants that ensure a frictionless operation of the hospital machine. When such a machine is working smoothly, the extravagances I have mentioned as well as many more which enter into increased per capita cost can be decreased if not entirely eliminated. There can be but one captain on a ship and on the hospital ship the superintendent must be that captain. The staff of the hospital through its proper representatives should have such influence with the superintendent in matters involving professional personnel and professional care as to be almost authorita-

tive. The superintendent is by far the most favorably situated person to develop teamwork, but if he has not the requisite qualities and if he discovers those qualities in a member of the professional staff he can profitably enlist the aid of that member to develop the spirit of cooperation with and loyalty to the hospital.

In my opinion, an organized professional staff, working under a written constitution and by-laws plainly defining duties, responsibilities and restrictions, is essential. The professional man resents direction or dictation by a layman in his professional work and sometimes reacts violently. Some doctors are like balky horses and can neither be driven nor led. A hospital is better off without such men on its staff, until they have been properly trained.

With a director of the professional work, by whatever name he may be called, who possesses the qualifications here enumerated, most of the extravagances connected with the visiting staff can be eliminated. The house staff will largely pattern its attitude after that of the visiting staff, but beside the moral influence of example, more definite supervision and authority should be established. This should be exercised by an intern committee of the staff, which should have authority to handle all matters of discipline requiring corrective measures no more severe than a reprimand. This committee should be advisory in its functions as well as disciplinary, and it is through this advisory contact that the greatest cooperation from interns may be obtained.

To obtain economical operation it is necessary first to ascertain where extravagances exist. Even with this information, neither organization nor personnel will effectively handle the situation unless persistent watchfulness is observed.¹

American Hospital at Neuilly Seeks Funds

In common with many hospitals at the present time, the American Hospital at Neuilly, France, is having financial difficulties, according to correspondence to the *Journal of the American Medical Association*. An appeal will become necessary, according to Dr. Edmund Gros, chief physician, if the hospital is to continue its work. All Americans who have enjoyed the advantages of the hospital are being asked to help, and it is expected that \$300,000, the sum needed to cover the deficit and to provide funds for running expenses, will be forthcoming.

¹Read at the Ohio Hospital Association meeting, Cleveland, April 28 and 29.

How New Jersey Is Caring for Its Chronic Sick

By WILLIAM J. ELLIS

Commissioner, State Department of Institutions and Agencies, Trenton, N. J.

A JOINT resolution passed by the 1931 New Jersey legislature directed the State Department of Institutions and Agencies to make a survey of all relevant facts pertaining to boys and girls and men and women of rational mind who have incurable ailments, diseases and disablements, because this group is not deemed susceptible to physical or vocational rehabilitation and because, with the exception of epileptics, New Jersey has made no provision for their maintenance in any of the state's institutions.

The sponsor of this resolution had in mind the need for a comprehensive study also of that larger group of persons who are termed the chronic sick—a study that will determine the prevalence of chronic diseases, the existing facilities for their care and the institutional and other

services required in order to provide for the chronic sufferers competent medical, nursing and social care and rehabilitative services.

Before attempting to discover how many chronic sick there are in New Jersey, it may be advisable to define the term chronic disease. Dr. Ernst P. Boas, New York City, an authority in this field, defines chronic diseases (excluding pulmonary tuberculosis and mental diseases) as illness lasting over a period of three months or more which prevents the patient from following his customary daily routine and which necessitates medical or nursing care at home or in an institution. Chronic physical disability is determined largely by disease of the heart and arteries, organic affections of the nervous system, cancer, nontuberculous disease of the lungs, the various forms of rheu-



One of the buildings of the Bergen County Hospital, Ridgewood, N. J., where chronic patients are treated.

matism and Bright's disease, diabetes mellitus, and other disturbances of the glands of internal secretion or of metabolism.¹ There also needs to be considered the crippled, both those whose condition requires prolonged rehabilitative treatment and those termed the helplessly crippled, who mainly present a problem of custodial care.

On the basis of surveys made in other communities, it is safe to estimate that there are between 30,000 and 40,000 chronic sick in New Jersey needing specialized medical or nursing care. In these surveys the ratio of chronic disease of various kinds to the general population was found to range from 100 to 200, that is, one in every 100 to 200 persons in the general population was found to suffer from chronic disease of some sort.

What Other Surveys Show

It is not to be inferred that all those who suffer from chronic diseases require institutional care. At this moment about 3,000 are cared for in institutions—2,000 in county and municipal almshouses (welfare houses) and an additional 1,000 in general hospitals, in various licensed nursing homes and licensed private hospitals.

Using as a basis studies made by the Welfare Council of New York City, Dr. Linsly R. Williams, director, New York Academy of Medicine, estimates that there are at least 70,000 persons in New York City who are continuously ill of chronic disease, with a resultant annual loss to the community of more than \$100,000,000. In the survey made by the Boston Council of Social Agencies, there were discovered 4,316 persons chronically ill—a ratio of 1 to each 185 of the population of the city of Boston. In the Philadelphia Hospital and Health Survey made in 1929, it was estimated that there were in the city of Philadelphia about 11,172 chronic invalids of all ages. Approximately one-half million individuals in Massachusetts are sick with chronic diseases at any one moment, according to a statement made by Dr. Herbert L. Lombard, Massachusetts Department of Public Health, before the 1930 National Conference of Social Work.

In connection with determining the number of the chronic sick in urban and rural communities, it is interesting to consider the observation made by Doctor Lombard. "There is more chronic sickness in the country than in the city. Persons in rural sections do not consult physicians as much as do those in cities. This probably is one reason for the difference in the sickness rates. Different living conditions, different working conditions and different psychological attitudes may account for the remainder of the rural and urban differences, al-

though it is probable that other unknown variables enter in."

The problem is becoming increasingly urgent as, with the increase in the average expectancy of life, the proportion of persons in the community of the ages in which we find the majority of chronic sufferers increases. "With the progressive decrease in the death rate from infectious diseases which has taken place in recent years, more and more persons survive middle life, to succumb at a more advanced age to disease obscure in origin and chronic in character."

In the 1880 census, 18.5 per cent of the population of New Jersey were found in the age groups of forty-five years and over. In the 1920 census, these same age groups constituted 21.1 per cent of the total population. Considering statistics of deaths in this connection, it will be found that in 1880 only 21.1 per cent of all deaths occurred among persons sixty years of age and over. In 1930, this proportion has more than doubled—44.1 per cent of all deaths having occurred among persons sixty years of age and over. Conversely, the deaths of children under five, which constituted 39.1 per cent of all deaths in 1880, have been reduced to 12.1 per cent in 1930.

An analysis of the causes of 43,190 deaths that occurred in New Jersey in 1930 showed that 23,393 (54.3 per cent) of the deaths were due to chronic diseases; and, in the age group sixty years and over, almost 75 per cent were attributable to chronic diseases. The heaviest death toll was taken by organic disease of the heart (21.7 per cent), by cancer and other tumors (10 per cent) and by acute nephritis (9.7 per cent). Considering the age group sixty years and over alone, we find that organic diseases of the heart were responsible for 31.8 per cent of all deaths, acute nephritis for 13.9 per cent, cancer and other tumors for 12.6 per cent and cerebral hemorrhage and softening of the brain for 12.5 per cent of all deaths among persons of this age.

Chronic Disease Among the Old and Young

In citing the relative proportions of deaths caused by chronic illness, it is important to consider that in the group of deaths caused by chronic illness only those are included that are generally recognized as being preceded by a lengthy illness and a long period of treatment. To this number must be added a considerable number of persons whose deaths are classified as acute cases but whose condition has been preceded or complicated by chronic illness.

A somewhat detailed analysis of heart disease, cancer and nephritis, diseases that constitute almost one-third of all deaths, may be of interest.

¹Social Work Year Book, 1929, p. 79.

Heart disease: In 1920, 12.2 per cent of all deaths were reported as having been due to heart disease. In 1930, this proportion increased to 21.7 per cent. In 1920, 28.6 per cent of those between thirty and fifty-nine years of age were reported as having died from heart disease. In 1930, more than 30 per cent (30.2 per cent) were reported as having died from heart disease. Cancer: In 1880, only 2.2 per cent were reported as having

that contrary to the customary belief, chronic disease is not mainly a problem of the later years of life. In the survey made by the New York City Welfare Council, it was found that nearly half of all the chronically ill persons were under forty years of age, nearly a third were children under sixteen years of age, chiefly children with orthopedic and cardiac disorders. Only a fifth of the whole number were aged persons of seventy years



The occupational therapy provided at Essex Mountain Sanatorium, Verona, N. J., is an important aid in the treatment of the tuberculous patients.

died from cancer. This proportion has gradually increased and constituted 4.7 per cent in 1910, 6.8 per cent in 1920 and 10 per cent in 1930. The mortality figures show that between 1910 and 1930 there occurred fewer deaths from cancer and other tumors among the younger age groups but that there has been a progressive increase in the age period sixty years of age and over. In 1910, 49.7 per cent were due to cancer and other tumors, 52.8 per cent in 1920 and 55.4 per cent in 1930. Nephritis: Nephritis was reported as the cause of death in 8.3 per cent of all deaths in 1920 and in 1930, 9.6 per cent. Here also the age group sixty years and over has been adversely affected, as 60.2 per cent were reported as having died from nephritis in 1920 as against 64.2 per cent in 1930.

The various surveys that have been made of the chronic sick have disclosed the important fact

and over. In the Boston Survey of Chronic Disease (made by the Boston Council of Social Agencies) 17.7 per cent of the patients were found to be under fifteen years of age. Chronic heart disease, infantile paralysis, fractures and tuberculous bones and joints contributed largely to this numerous company of handicapped youth. The 1931 report of the New Jersey Crippled Children's Commission shows that 12,220 crippled children have been visited in New Jersey, and operations, treatments or appliances have been obtained for 1,334. This number of crippled children does not include the large number under continued treatment of physicians and in hospitals and clinics.

"In chronic disease, economic and social factors are fully as significant as medical ones," declares Doctor Boas. "Even a needy family can ordinarily recover from the effect of an acute illness, but when disease is protracted, the cost of medical

attendance, medicines, special food and sickroom sundries becomes prohibitive. It makes itself felt especially when a wage earner is ill, but the illness of a wife is serious also, for it involves unusual expenditures for the maintenance of the household. The life of every member of the family is in some way conditioned by the fact of such illness. A heavy strain is placed on the varied human relationships of the family. Because of all these factors the family frequently becomes disorganized and destitute. As a consequence social agencies are called on for relief and a tax is laid on community resources."

Those thoroughly conversant with the problem of the chronic sick tell us that chronic diseases are a definite challenge to the physician as well as to the social and health worker. In the stimulating book, "The Challenge of Chronic Diseases," Doctor Boas and Doctor Michelson point out that "adequate treatment of the chronic sick has been greatly hindered by two misconceptions regarding the nature of their ailments. The chronic diseases have been for the most part labeled 'incurable' and they have been confused with the gradual decline in physical well-being which accompanies old age."

It is felt that this is at times an unwarranted assumption, and it has a depressing effect on the patient and checks every effort at rehabilitation. "Persons between their fiftieth and seventieth years who are disabled and infirm should be regarded as sick, not as suffering from old age," declares Doctor Boas. "The term 'senile' like the

term 'incurable' involves an assumption of inevitableness which leads these victims of disease to be regarded as useless derelicts rather than as patients who need medical attention."

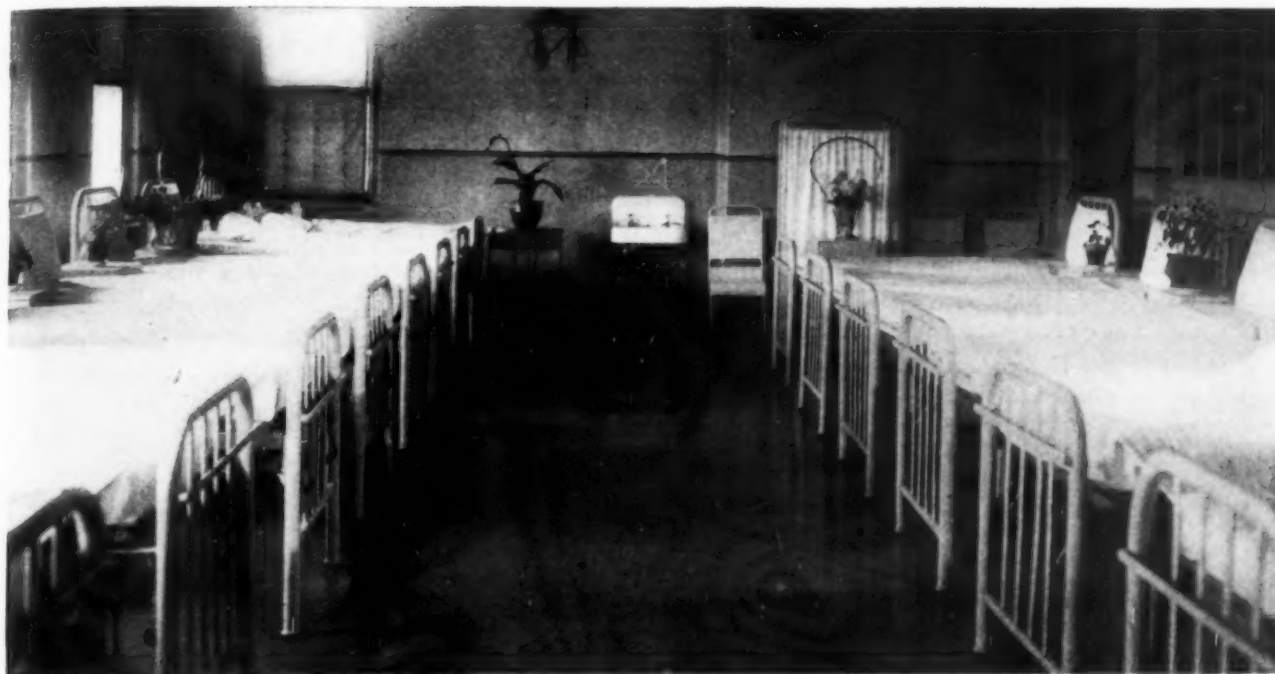
Dr. William J. Monaghan, medical director, Hudson County General Hospital, Secaucus, N. J., a leader in the field of caring for the chronically ill, likewise feels that the fact that a patient is afflicted with a chronic disease and requires prolonged treatment should not debar him from hospital service. "Too often it is assumed that he is incurable and beyond hope, when it is unquestionably a fact that he can be improved or even restored to such an extent that he can provide for himself fully or in part."

This challenge of chronic illness applies not only to the aged and those of middle age but also to children, as is pointed out in the Boston Report of Chronic Disease. "Each one of these children has his future ahead of him. If there is hope of turning any of the chronic sick from liabilities into assets, it lies mostly in this group of the young. But if anything of importance is to be accomplished it must be done by constructive measures. Not only must these children have careful medical and nursing attention, but they must have education and training for some vocation in life least likely to yield to their handicap."

The various reports of the New Jersey Crippled Children's Commission strongly emphasize the need for early examination and diagnosis, medical and surgical care and general and vocational education. They point out that an important step in



Tuberculous patients at Essex Mountain Sanatorium derive great enjoyment and benefit from the chapel, which is a part of the hospital.



Patients with chronic diseases receive the best of care in the cheerful, homelike wards of the Essex County Hospital, Cedar Grove, N. J.

any preventive program is the finding of children who have had progressive disease or accidents, and who may become permanently crippled unless proper treatment and care are immediately provided.

Although in general, extensive provisions have been made for the treatment of the mentally ill, the mentally deficient and the tuberculous, few New Jersey communities are providing adequate care for the chronic sick outside of the limited facilities offered by special institutions, the general hospitals and the county almshouses.

A study made by the Department of Institutions and Agencies shows that at the present time there are sixty-six licensed¹ nursing homes with a total bed capacity of 650, and thirty-seven licensed private hospitals with a total bed capacity of 854. In the licensed nursing homes, the rate of occupancy is approximately 60 per cent. Of the occupied beds, 250 are used for chronic patients. Nineteen of the licensed nursing homes, which constitute one-third of the total bed capacity, charge from \$10 to \$20 weekly; in twenty-six homes the rate is from \$25 to \$35 a week and in twenty-one homes the rate is from \$35 to \$75 a week. Thirteen of the thirty-seven licensed private hospitals accept chronic cases in addition to medical, surgical and maternity cases at regular rates of \$4 a day and upward.

The type of hospital care provided for the indigent chronic sick in the hospitals maintained by Atlantic, Bergen, Camden, Hudson and Monmouth

Counties, to mention only a few, is a good example of what needs to be done in all the counties and municipalities of the state. The Hudson County Hospital is an outstanding example of scientific and humanitarian accomplishments. As pointed out by Doctor Monaghan, the present day almshouse inmates are unable to maintain themselves because of some chronic physical condition that handicaps them in earning a livelihood. He feels that the almshouse must be a real hospital, supplying efficient medical and nursing services.

Monmouth County has gone a long way toward meeting the problem. The opening of the new Monmouth County Welfare House is indicative of the trend of supplying modern institutional hospital care for the chronic sick in the state.

In a recent survey of the general hospitals made by the Department of Institutions and Agencies, the question was asked, "Are existing community facilities for chronics adequate?" This question was answered in the negative by a majority of the hospitals. Existing community facilities for chronics seem to be approaching adequacy in only two or three communities.

Study needs to be given to the question of the extent to which chronics should be cared for in general hospitals. Hospital authorities generally agree that chronic patients need specialized care in separate institutions and that this type of patient after having passed the acute stages of illness should not be retained in general hospitals designed for persons temporarily ill. As pointed out in the Philadelphia Hospital and Health Survey

¹Licensed by the State Department of Institutions and Agencies under Chapter 133, Laws of 1927 as amended.

(1929): "Acute general hospitals are burdened with chronic patients for whom their facilities are unsuited and too costly for the type of care needed by most chronic invalids. Most of these patients can be properly cared for in institutions that cost to operate about one-half the cost of care in acute general hospitals."

But it must be remembered that many so-called chronics should have the best medical and diagnostic service and that they can be benefited by modern and adequate treatment facilities such as are available in the general hospitals.

In the survey undertaken by the Department of Institutions and Agencies, an effort has been made to determine the extent of existing facilities for the care of the chronic sick and an attempt has been made to measure the future needs. Following similar surveys in other communities, questions such as these have been studied: What is the extent of chronic disease and is it on the increase? How are we meeting the problem of the chronically ill? Is there a need for more resources; if so, of what type? What provisions should there be for the patient of moderate means? How are the various diseases represented in the whole group of the chronically ill? What is the duration of the various chronic diseases and of institutional care? How does chronic disease affect different groups in the community (age, sex, occupation, urban and rural)? What are the social and economic problems created by chronic disease?

Since chronic illness is not only an outstanding public health problem but also an important problem from the social and economic standpoint, an effort will be made to obtain the active cooperation of the medical profession, social and health workers, educational authorities and employers in finding an effective solution to this problem.

In this connection the findings of the excellent survey of the New Jersey Crippled Children's Commission will be of special value and we have been assured of the whole-hearted cooperation of this able commission and its chairman, Joseph G. Buch.¹

What Philadelphia Citizens Spend on Medical and Hospital Care

Having accomplished at Philadelphia, the first complete survey of the medical facilities of any large city in the United States, the Committee on the Costs of Medical Care, Washington, D. C., in a statement recently made public by the Department of the Interior, has found that citizens of that city

average spending \$50 each yearly on medical care. This per capita amount is divided among doctors, dentists, druggists and hospitals.

About one-third of all the patients in the city, however, are treated either free or at reduced rates, it was found.

The study was made as part of the committee's five-year investigation, now in its fourth year, of the nature and extent of sickness and disability in the United States and the existing facilities for dealing with them.

Philadelphia's total direct and indirect expenditures for medical care each year, it was found, were \$103,743,939, or more than \$50 for each inhabitant. Of this amount 26 per cent went to physicians and 13 per cent to dentists. Another 27 per cent was spent directly and indirectly on hospitals. Drugs and medicines cost 20 per cent.

The report shows that in Philadelphia much medical care was given free or at reduced rates. Forty per cent of all days of hospital care in Philadelphia were free and 8 per cent of all patients were treated free by physicians. "More than one-third of all patients," the report says, "received care free or at reduced rates."

A Successful Municipal Doctor System

In the thirty-five rural municipalities in the Canadian provinces of Saskatchewan and Manitoba, a municipal doctor system is in effect in which the doctors are paid from \$3,000 to \$5,000 a year.

Twenty-one physicians are employed full time by twenty of the thirty-two rural municipalities in Saskatchewan which have adopted the system of paying physicians a salary. The other twelve municipalities use the part-time services of seventeen physicians. Sometimes a part of the physician's salary is paid by the rural municipality, which corresponds to the county in the United States, and part by the towns or villages he serves. In Manitoba, three municipalities employ physicians.

These municipal physicians keep regular office hours, make calls on patients and discourage calls for trivial causes by charging fees for first calls.

The system was first established in 1921. Not one municipality has returned to the practice of depending upon private physicians, according to the Committee of the Costs of Medical Care which recently completed a field survey of the system. The committee observes that certain sections of the United States also face a shortage of rural physicians.

¹Address at the convention of the New Jersey Hospital Association in Atlantic City.

Can the Patient Pay? And Will He? Ask the Social Worker

By ELIZABETH WISNER, Ph.D.

Assistant Professor of Sociology, School of Social Work, Tulane University

THE social worker's skill in the use of the interview as a means of eliciting and interpreting pertinent facts regarding the financial ability of patients to pay for necessary hospital and medical care is more or less recognized as an important factor in the administrative machinery of the hospital. It is the social worker who must ascertain the answers to these questions: Who should be admitted as a free or part-pay patient to a hospital or clinic in a given community and how can the hospitals and the community find the answer to this question? Who is eligible and what facts have determined this status of eligibility?

The Problem of Caring for the Sick Poor

The problem of admitting the sick poor has long been one fraught with difficulty. This is shown in an interesting account of English hospitals in the eighteenth century, from which the following is quoted:

"It must not be supposed that hospitals in the eighteenth century were by any means model institutions from a modern point of view. In the first place, admission could generally only be obtained with a letter of recommendation from a subscriber and after tiresome formalities, although both these were omitted in some hospitals in accident or other urgent cases.

"The admission by letter was in keeping with the times. People liked their charity to have a personal element and they enjoyed patronage which then pervaded every aspect of life. Moreover, it is doubtful if the subscribers could have trusted the officials with the admission of patients. Further, fees were often extracted by the nurses and porters, sometimes illicitly. It was often customary to charge for laundry and, a gruesome item, it was usual to demand a sum from patients on admission in security for burial. No doubt in many cases all of these charges were met by the wealthy patron who gave the letter of recommendation to the patient."¹

Increasingly in recent years, the eligibility of

patients for treatment in city and county hospitals has been a matter of concern both to the taxpayer and to the medical profession. Institutions under private auspices receiving city subsidies or contributions from community chests have also felt the pressure to standardize and to relate their particular service to community needs. Not even the teaching hospitals, however selective they may desire to keep their intake, can escape entirely the responsibility for considering the groups to be served in a community.

Furthermore, with the mounting costs of medical service, the procedure of rating the free, the part-pay and the pay patient has become technical and complicated as has also the effort toward formulating a standard definition of such a procedure. Such a project² as the registration of social statistics carried on under the auspices of the Association of Community Chests and Councils and the local community research committee, University of Chicago, brings to light the lack of uniformity in clinic ratings in many chest cities. For instance, it is significant that standards set up by the American Hospital Association and originally adopted by the committee were revised on the advice of several hospital superintendents and others familiar with hospital administration because of the difficulty of getting reports based on these standards. Numerous examples could be cited of the difficulty of obtaining comparable financial data from hospitals. But the pressure towards standardization that always comes from cooperative financing has resulted in a more intelligent basis of rating patients in certain chest cities. Such efforts are symptomatic and far-reaching.

Results of Cooperative Efforts

Councils of social agencies are also influential in formulating rules for admission of free patients and the standards set up under the auspices of the council of social agencies, Duluth, Minn., by a committee of representatives from the county medical society, two of the local hospitals, the

¹Buer, M. C., *Health, Wealth and Population in the Early Days of the Industrial Revolution*, London, 1926.

²Jeter, Helen R. and McMillen, A. W., *Registration of Social Statistics for the Year 1928*, Chicago, 1930, chap. 14.

family welfare society and the community fund are of interest. Emphasis is placed upon the social investigation to include information as to income, size of family, current expenses, debts, financial ability and the willingness of relatives to help. All cases are to be cleared through the social service exchange and the troublesome problem of the ownership of a home or an automobile is dealt with specifically. For example, rule No. 4 provides that "the ownership of an inexpensive automobile should not of itself be deemed sufficient reason for refusing free care if (a) the patient will agree to sell the car for the best price he can get, or if (b) the ownership of the car is essential to his earning of a livelihood." Many examples of similar efforts in other cities could be cited.

Changed Conceptions

But let us turn now to a more general consideration of eligibility for admission as it concerns tax supported institutions, state, city and county. The changed conception from "pauperism" or "destitution" as a basis of eligibility to that of "inability to pay for the necessary medical care" is of special interest to the social worker and marches along with her own changed concepts from "less eligibility" to "adequacy" in social treatment.

The medical profession has seen the dispensary and the average municipal hospital evolve from an institution with incredibly low standards bordering on the almshouse type to a large medical unit often well equipped, staffed by experts in several fields and offering a service not to the so-called charity or pauper patients alone but conforming also to the newer ideas of service to the community and providing care on a part-pay sliding scale basis.

On the other hand the social worker has seen a marked change in her own province from the "charity" concept to the "welfare" concept of a minimum below which no individual should be allowed to fall. This has been made objective through the use of the budget, and the rise in standards that has accompanied her skill in the use of the social case work method is of special interest at present. From those discussions of the nineties, which classified clients as "worthy of continuous relief," "worthy of temporary relief" or "worthy of no relief," to the Chapin study of "The Cost of Living Among Working Men's Families in New York City" in 1907, which came out of the social worker's desire to measure adequacy and which arrived at certain definite dietary and clothing standards, there has come a marked change in our thinking on this subject.

A little later a budget that would provide for

families living under "tolerably decent conditions" was articulated by one charity organization society, and in 1912 the first complete family budget was put into use in Chicago. This progressed somewhat beyond the former minimum and defined the minimum normal standard as "the lowest standard which will permit of the full growth, training and development of children and provide for the health and efficiency of adults." Later revisions of this budget and similar budgets used by social agencies elsewhere have been based on an estimate of "everything necessary for a manner of living that will make possible a high standard of physical, mental and moral health and efficiency for adults and full physical and mental development of children with provisions for their moral welfare."¹

With this emphasis upon physical well-being it must be borne in mind that the social worker in estimating the budget for the dependent families must still rely upon the use of the free medical and dental services in the community, and that such items as car fare to and from clinics and occasional medical supplies are all that the usual relief budget can supply. Without such resources, it is a matter of common knowledge that the standard of living of the average workingman's family is immediately jeopardized in the face of any serious illness. So much a matter of concern to the entire community as well as to the medical profession is this matter of adequate medical service that one fairly recent effort to legislate regarding admission to a tax supported hospital will illustrate the danger of acting in the interest of one group only.

Louisiana Passes a Bill

In 1926 through the effort of the medical abuse committee of the local medical society, the Louisiana legislature passed a bill restricting the admission of patients to the state charity hospitals to those who were destitute. The bill required the use of a questionnaire to determine the fact of destitution and fixed a penalty for fraudulent statements. The New Orleans Charity Hospital had operated since 1735 without any statutory regulation of this matter. The pressure for restriction had, of course, come as a result of the general impression that medical abuse was rampant and that the steady increase of patients during the preceding five years, which mounted from 17,309 patients admitted to the wards in 1921 to 27,292 patients in 1926, could be checked in this way. The appeal to the legislature for the passage of such a bill was presumably supported by facts

¹The Chicago Standard Budget for Dependent Families issued by the Chicago Council of Social Agencies, 1929.

drawn from the United States census enumeration of paupers in almshouses which figures were cited as proof of the decrease in pauperism throughout the state and consequently were accepted as proof of the abuse of the free medical service by the state.

It is interesting that a decrease from 10.1 paupers per 100,000 population in 1904 to 9.5 paupers in 1923, or a decrease of .6 paupers per 100,000 population in nineteen years was considered as such a proof and that such data were used in the face of the fact that there were practically no almshouses in Louisiana. Moreover, the census report warned against the use of the figures as an index of decrease in pauperism. But the committee concluded: "It is therefore conclusive that pauperism is diminishing in the state and that the prodigious increase in applications for admittance to the hospital must be from the ranks of those fully able to pay for medical services."

What Other Hospitals Are Doing

It is also of interest that the bill provided for a penalty of a fine or imprisonment of the patient for fraudulent statements regarding his financial status instead of making some provision to obtain payment from him or from those legally responsible for him. Certainly it would seem to be a sounder public policy to provide for reimbursement from those found upon investigation to be financially able to pay than to place the institution in the position of prosecuting patients who had been improperly admitted. It should perhaps be pointed out that the hospital was left no discretion in the matter and that the bill was sponsored by the medical abuse committee. Furthermore, since the patients have continued to increase steadily since 1926, when the system was inaugurated, the futility of such a method is obvious. The protection of the hospital and the medical profession cannot be accomplished without taking into consideration other social and economic factors, and the procedure of determining eligibility must be performed by an experienced person.

Because of our interest in this particular hospital, an effort was made to secure information from similar hospitals elsewhere, first as to how eligibility was defined and, second, who conducted the investigation of patients and determined charges. Data were obtained from fifty-one hospitals including some in the North, East and West, and a larger number in all of the Southern states. It should perhaps be pointed out that the development of the state university hospital organized for research and teaching and for the care of the sick is in no way related to the origin and development of the "state" or "charity" hospitals.

It is, therefore, to be expected that the newer conception of the "inability of the patients of those persons legally responsible to pay the necessary medical and surgical care" has been embodied into the statutes governing these institutions rather than those governing the pauper status of the older hospitals.

Among the larger city and county hospitals studied, only the Kansas City General, Kansas City, Mo., and the Louisville City Hospital, Louisville, Ky., still measure eligibility by destitution or indigence, whereas the others conform to the more modern conception. As an example of this, the Los Angeles General Hospital stated that the financial inability of the patient to pay for hospital care elsewhere, taking into account all of his needs including medical, surgical and convalescent care as well as his social needs, was considered.

Although not included in this study, the information regarding the liberal policy formulated by the Massachusetts Homeopathic Hospital, Boston, indicates how far thinking has moved in this direction. This hospital which, of course, is not a public institution has devised a fairly elaborate system in which budgets showing "the cost of living" and the possible margin of saving in the various groups are considered in the preparation of rate tables. The superintendent emphasizes the importance of taking into consideration the probable duration of the patient's illness.

Thus it is seen that while the material gathered is incomplete it embodies a century of thinking regarding our attitude towards the sick poor, from the hospital designed for patients "worthy of charity" to the modern institution concerned with prevention as well as cure. It indicates the trend in the organization of medical services from the nineteenth to the twentieth centuries.

Determining Patients' Eligibility

With regard to the problem of admitting and the machinery for passing upon the eligibility of patients, various practices were of course found. In the state university hospitals where the patients come from a wide area, the need for investigation to determine eligibility is important. In the main, the responsibility must rest upon the local or county officials and the degree to which this practice is socialized depends upon what social machinery for investigation is available to the county officials. The local doctor, who must pass upon the medical need, the public health nurse, the trained social worker and sometimes the probate judge, the local overseer or poor law official all figure in the procedure.

In the city and county hospitals the practices

varied greatly. In metropolitan centers such as New York and Philadelphia, the departments of public hospitals maintain their own investigating bureaus while at the San Francisco Hospital all investigations are made by the social service division of the department of health. The Cook County Bureau of Public Welfare is responsible for investigations for the Cook County Hospital, Chicago, while in other hospitals this duty has been placed in the social service departments. Others realize that such investigation is an administrative function and provide a trained social investigator as a part of the administration.

Policies Are Flexible

In the smaller city and county hospitals maintained in the Southern states the arrangements were much less formal but there was a rather wide recognition of the need for some socially trained person to make investigations. Hospitals, of course, have often grown up in a more or less chaotic way, sometimes dating back to old charitable foundations, later becoming public institutions. One hospital in South Carolina illustrates this type. It dates from an early endowment which specified that only destitute patients should be admitted and that they must individually be passed upon by some member of the local medical society. As a matter of practice the hospital follows a fairly liberal policy of meeting the needs of its particular community and has arranged that the social workers in the city welfare bureau shall make all investigations.

Thus it seems evident that although there is a wide range in the policies and the practices of state and local hospitals, there is a trend towards relating hospital service to needs of the various low income groups in the communities. Furthermore, although the older "pauper" or "indigence" conception of eligibility has been embedded in the regulations governing many of our public hospitals, actually a progressively modern and socialized procedure for admitting patients is under way even in such hospitals.

A recognition of the fact that the judgment of the admitting officer has a scientific foundation, the use of facts skillfully obtained and interpreted, and properly graded schedules of fees and standard budgets will serve to further efficient and economical administration on the part of the hospital and will encourage it to function to the best interests of its patients. This calls for a further recognition of the social aspects of admitting and of the need to obtain personnel equipped to do the job successfully.¹

¹Read at the meeting of the American Hospital Association, New Orleans.

What Physicians Earn in Various Positions

A medical specialist with successful experience covering a period from five to ten years may earn from \$8,000 to \$30,000 annually, the associate specialist in higher education, Walter J. Greenleaf, declares in a statement made public by the United States Office of Education.

Pointing out that the aims of the profession are, first, the alleviation of pain and the promotion of health, attention is called to the economic returns of those who are specialists or as physicians are ambitious.

Ambitious doctors, it is pointed out, should increase their incomes to \$5,000 or \$8,000. Salaried positions in laboratories, hospitals and Government services average from \$1,500 to \$5,000 a year; a few commissioners of health receive \$8,000 to \$10,000 or more for their services.

Besides engaging in private practice, medical graduates now enter the field of medical research; teach in medical schools and elsewhere; become public health officials in cities, counties, states and federal service; serve as medical officers in the army or navy; are employed by industrial concerns and insurance companies.

Reported Abuses in Care of Injured Workmen to Be Studied

A study of the medical treatment given to injured workmen of New York State who are beneficiaries under the workmen's compensation act is to be made by a committee recently appointed by Gov. Franklin D. Roosevelt, with a view to correcting abuses of which complaints have been made.

The questions on which the committee will be asked to report are:

1. Adequate rates to hospitals for bed and clinic care in compensation cases.
2. Suggestions as to the elimination of causes for delay in payment of hospital bills.
3. The subject of hospital record keeping in workmen's compensation cases.
4. Study of medical and hospital treatment and payment therefor in certain cases that have regularly eluded payment of hospital and medical costs in the past, such as third-party actions, non-insured employers' cases and injuries not reported to the department of labor.

Dr. S. S. Goldwater, consultant, New York City, is a member of the committee.

Creating an Endowment Income Without an Endowment

By CHARLES A. WORDELL

Director, St. Luke's Hospital, Chicago

TODAY practically every hospital in the nation is suffering from a reduction of revenue as the direct result of the general financial and business depression. The task confronting the hospital directors at this time is how to solve the problem of the loss of income that has brought about the present economic condition in the hospital world.

Because of the wide difference in types of hospitals and in the conditions under which they are operated, it is obviously impossible to formulate a policy or to prescribe a panacea that will solve the problem that the hospitals are facing. A policy or procedure that might assist in solving the problem of a loss in revenue for a nonprofit hospital might not be applicable to a private institution operated for profit, and vice versa.

While the present economic condition of hospitals may be similar and a loss of revenue may be universally responsible for the condition, the solution of the problem must be individual rather than collective. Each hospital must evolve a solution of its own peculiar and individual problem.

The important question is: How shall hospital administrators go about this admittedly difficult task? Shall they reduce hospital expenses, increase the income, or do both?

The hospital administrator should first make a careful and comprehensive survey of his own institution. Once the facts are available, a method of procedure may be determined.

The Administrator's Responsibility

There are certain well defined limits as to what a hospital may do to reduce expenses in a time of depression. Rooms and even entire wards may be closed. Personnel may be reduced. Group nursing may be put into operation. Part-time work in certain departments, curtailment in purchases and part-time vacations may be resorted to. On the other hand, the standard of service must be rigidly maintained. And the hospital must, regardless of depression, continue its fourfold program of curing illness, preventing illness, educating those who will care for illness and doing as much research as

possible into the causes and cures of the many illnesses that occur.

The need for this program of work on the part of a hospital is as vital in times of depression as it is in better times. The hospital must carry on its task regardless of financial loss.

How, then, shall the hospital increase its revenue in order that it may operate without a deficit and continue to carry on its fourfold program? The answer to this problem of reducing expenses lies with the administrator of each individual hospital.

What One Hospital Has Done

The ultimate object of a large hospital operating not for profit and consequently forced to do an ever increasing amount of free work for indigent patients is, in many cases, an adequate endowment. At the present time, however, an effort to add to the hospital's endowment fund is not practical because of the general depression. But it is possible to obtain a fund equivalent to the income from an endowment of \$500,000 through the organization of a hospital association, which invites the assistance of charitable residents of a community through annual contributions in the form of membership dues.

St. Luke's Hospital, Chicago, has organized an association of this type on the basis of the constantly increasing demands for free treatment made upon the hospital by thousands of Chicago families urgently in need of medical attention and hospital care.

To enable the hospital to continue to meet these rapidly increasing demands, membership in the St. Luke's Hospital Association has been made available to every friend of the hospital wishing to help carry on the work among Chicago families unable to pay for medical care and hospitalization.

Memberships in the St. Luke's Hospital Association are divided into five classes in order that all persons may participate in a manner consistent with their means. Each of these classes, which range from that of a participating membership with annual dues of \$10 to a life membership of

\$1,000, has full and equal rights with the others.

Besides making possible free hospital care for and the treatment of worthy indigent patients in Chicago, each individual membership in the association entitles the member to an identification card ensuring the bearer of an immediate report to relatives in case of accident or serious illness. The card specifies that St. Luke's Hospital should be informed in any emergency. The hospital staff, through information from a file compiled for that purpose, will then immediately notify the proper person. In addition to the identification card, each member of the St. Luke's Hospital Association receives a membership certificate and all bulletins, pamphlets and reports issued by the hospital.

A short while ago St. Luke's Hospital mailed a carefully prepared pamphlet telling the story of the hospital's work among Chicago's poor and explaining the purpose of the association to a selected list of friends of the hospital and former private room patients. The pamphlet was preceded by an exploitation letter signed by the president of the hospital, and this is now being followed up by a definite program of letters.

To-day through the medium of the association, funds equivalent to the annual return from an endowment of \$200,000 have been received in the form of membership dues. From this beginning it will be possible to build up, in the years to come, a strong organization with thousands of members that will produce an annual fund comparable to the return from an endowment of several millions.

This is only an example of one method by which one hospital has added and is continuing to add to its revenue, an example of one way in which the problem of a decreased income is being met.

In the midst of this particularly trying period each individual institution must carefully study and analyze its own problem. And, having recognized the problem, each hospital must prepare and put into operation its own solution.

Protecting the Health of Student Nurses in Honolulu

Student nurses, upon their entrance to Queen's Hospital, Honolulu, must undergo a rigid physical examination, according to Hortense Jackson, instructress of nurses in the hospital's training school.

All minor ailments, such as a tendency to flat feet, dead teeth, poor posture or slight undernourishment, are recorded and a corrective régime prescribed. Each nurse also has a blood test, a urine test and a Schick test. All the findings of the

tests are entered on her health card, on which there is a complete record of the condition of her eyes, ears, nose, throat, skin, blood, heart, lungs, and feet, height, weight curve, blood type, white and red blood count and hemoglobin.

She must weigh at least 100 pounds before she enters training. Her weight is then recorded every three months, and if there is loss of weight the causes are investigated and extra nourishment is prescribed.

Recreation is regarded as a necessary part of the health program. Each day nurse has three hours a day for rest and recreation, with half a day through the week and again on Sunday. One evening a week is allowed off. On other nights, lights are out by ten o'clock. The night nurse has two hours off for rest during the night, and every morning all the night nurses do a course of deep breathing exercises to music out of doors. This is regarded as especially important for the night nurse. At times beach picnics and outings are arranged for the nurses. The mixture of races in Honolulu makes it imperative that the importance of physical exercise be emphasized, because Oriental girls seldom indulge in outdoor sports, and many of the nurses are Japanese.

Once a month a luncheon is held which is attended by the whole staff, including students, special nurses and house doctors. Usually several leading citizens are invited as well. The purpose of the luncheon is purely social. Work is not discussed, and it is said that this break in the monotony of routine is helpful to the *esprit de corps* of the training school.

A New "Manual of Hospital Management"

A new book on hospital management that is now available is called "Manual of Hospital Management for U. S. Marine Hospitals," by M. H. Foster, medical director, United States Public Health Service.

A review of the book made by the *Journal of the American Medical Association* points out that "much of the material would apply equally well to civilian hospitals. It contains chapters on hospital organization and administration, management of medical and surgical wards, dietetics, laundry, grounds, buildings and mechanical equipment. The appendix contains instructions, formulas, recipes and menus not usually found in books on hospital management."

It is published by the Government Printing Office, Washington, D. C.

A New Contagious Unit That Is Part of a General Hospital Plant

By BROWN and WHITESIDE

Architects, Wilmington, Del., and

S. S. GOLDWATER, M.D.

Consultant, New York City

THE erection of a new fireproof unit for communicable diseases by the Wilmington General Hospital, Wilmington, Del., is an event of considerable importance to the citizens of Wilmington and Newcastle County. In many cities of the size of Wilmington the hospitalization of communicable diseases is undertaken by the municipality itself. In larger cities this is almost invariably the practice, and everywhere the care of communicable diseases is regarded as a public responsibility. But a city of moderate size may find it advantageous to assign this public function to a private cooperating hospital, and this is the policy of Wilmington.

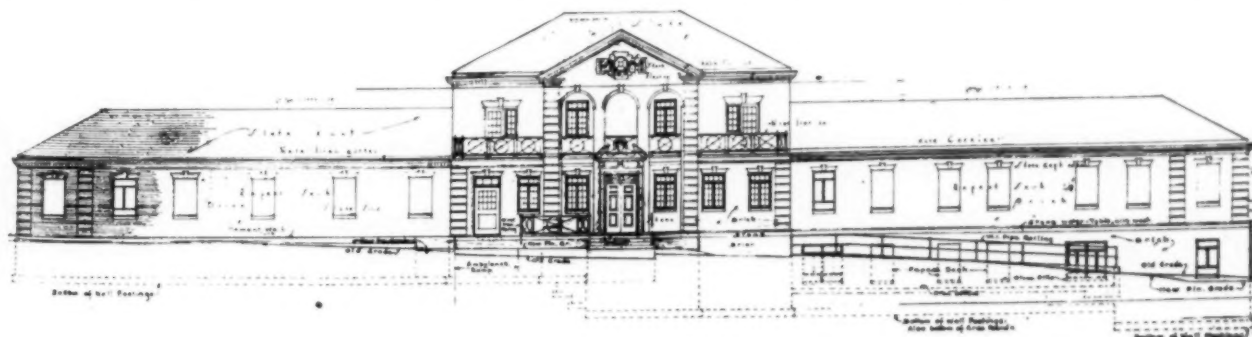
When a contagious unit of moderate size is part of a general hospital plant, there are distinct advantages in the way of utilization of the laboratory resources and other facilities of the hospital. Then, too, an effective clinical consultation service is always available. In contagious hospitals that have no relation to general hospital organizations, consulting service in emergencies is difficult to obtain on short notice and there is an increase in overhead expense due to duplication.

Flexibility of plan, significant in general hospital construction, is doubly important in the arrangement of a contagious unit. The old contagious building of the Wilmington General Hospital, which was originally built for other purposes, has a nominal capacity of about twenty-

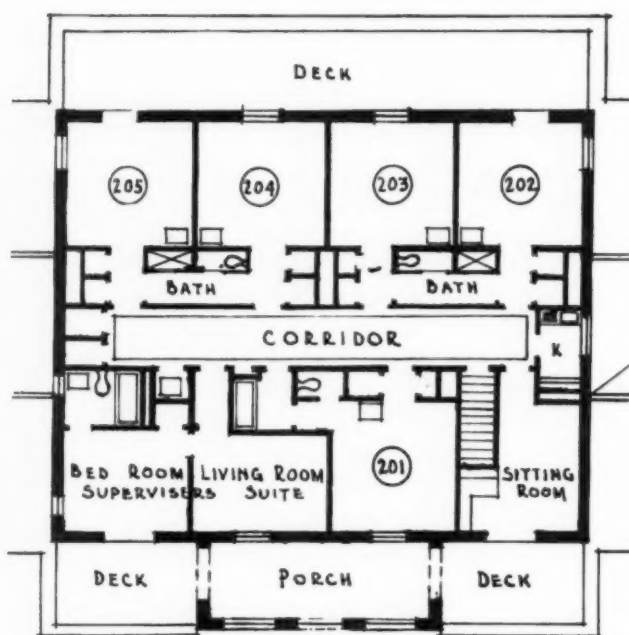


North elevation of the new unit.

eight beds. But since the order in which contagious diseases occur in a community can never be foreseen and is constantly changing, the working capacity of the existing unit has been frequently diminished to one-half or three-quarters of the full nominal bed capacity by the admission in rapid succession of a series of individual cases of different diseases. While the stated capacity of the new building is not materially greater than that of the old building, the new contagious ward will have the advantage (a) of a plan so flexible that every



The east elevation and details of the main entrance of the contagious unit of the Wilmington General Hospital, Wilmington, Del.

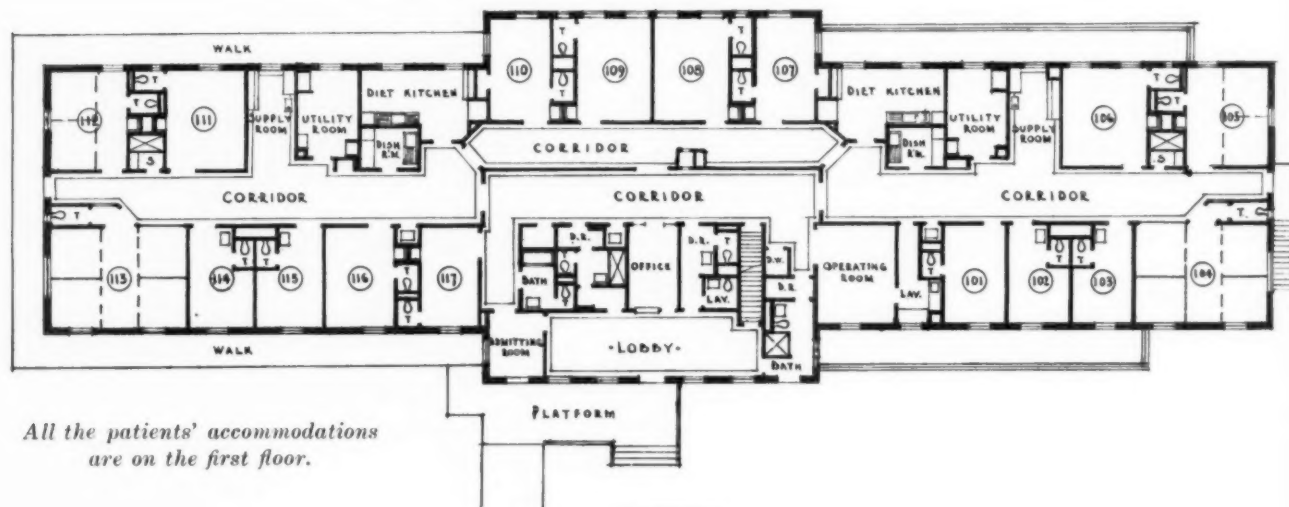


The second floor, which can be reached without contact with the patients, is devoted exclusively to living quarters for the nurses.

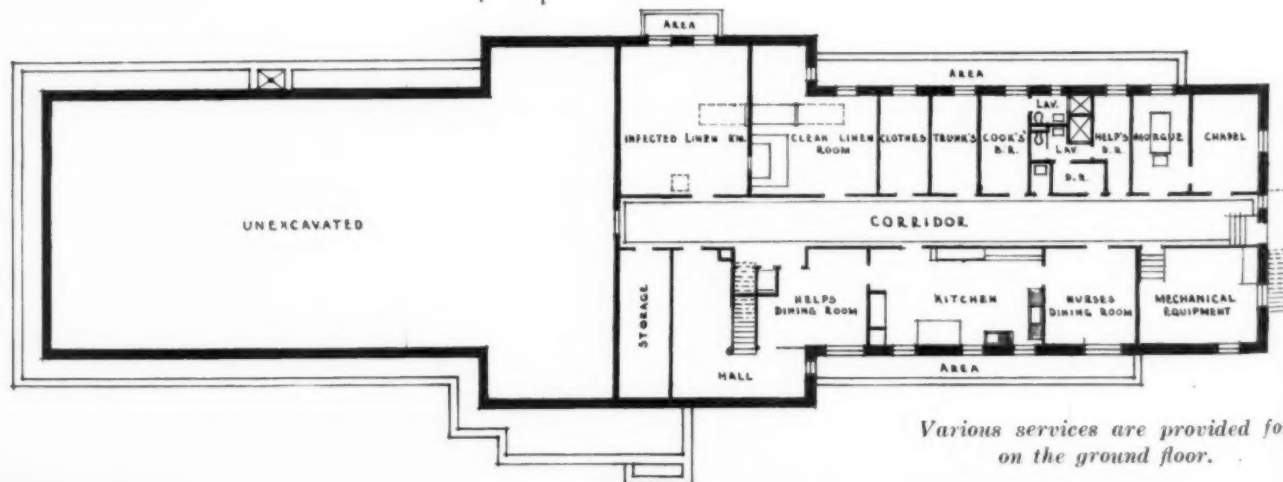
bed will be constantly available, (b) of complete equipment for emergencies and complications, (c) of carefully detailed sanitary finish, (d) of suitable facilities for the preparation and distribution of food and for incidental sterilizing processes, (e) of quarters for resident nurses, separated from the patients' quarters, and (f) of being a fireproof and thoroughly safe structure.

The Incidence of Contagious Diseases

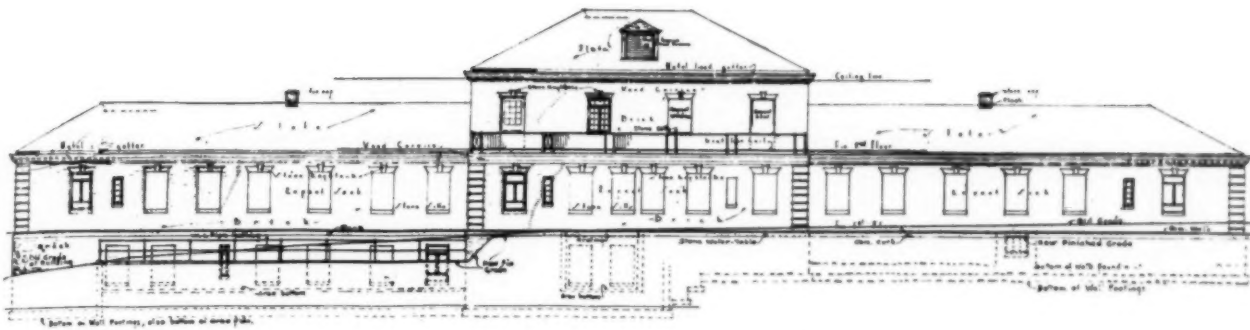
The number of persons incapacitated by non-communicable diseases does not greatly fluctuate from year to year, and for general hospital purposes one can estimate with some accuracy the number of hospital beds that a community requires. In the case of contagious diseases, standards cannot be fixed so easily. While in 1925, 1927, 1928 and 1929, the number of contagious cases reported in the city of Wilmington alone amounted in each year to more than 800 and less than 900 cases, the number of cases reported in the year 1926, when an epidemic of measles occurred, rose suddenly to 2,653. Epidemics are always possible, but as they are comparatively rare it would be wasteful to keep ready for occupancy at all times a number of beds



All the patients' accommodations are on the first floor.



Various services are provided for on the ground floor.



Details of construction are shown in this view of the west elevation.

sufficient to meet the peak load of communicable diseases.

In Wilmington and Newcastle County, the territory from which the contagious wing of the Wilmington General Hospital will derive its material, there were recorded in 1928 and 1929 approximately 1,500 cases in each year. Naturally these cases are not spread equally over the entire year. Maximum rating for the hospitalization of communicable disease is credited by the American Public Health Association to communities in which the number of communicable cases hospitalized equals 25 per cent of the total number reported. If in the case of the city of Wilmington and Newcastle County 25 per cent of the reported cases were hospitalized in a year, the number so cared for would be 375, a number that will be reached if each of the thirty beds in the new unit is occupied by twelve or thirteen different patients in the course of a year.

First Floor Devoted to Patients

Cases treated in the Wilmington General Hospital in recent years include scarlet fever, diphtheria, measles, mumps, acute poliomyelitis, anthrax, whooping cough, chicken pox, erysipelas, epidemic meningitis and a number of other minor varieties, and from this point of view the large number of separate rooms and small wards and the resulting flexibility of plan are of major importance.

All of the patients' accommodations in the new building will be on the first floor. The admission department is so arranged that patients can be readily distributed to various ward subdivisions. The largest single ward is a four-bed ward for children, subdivided into individual cubicles. There are numerous single and double rooms, and each ward and room has its own water supply and toilet facilities. Separate utensils will be provided for every patient, and the most careful aseptic technique will be enforced. The nurses' station, the supply rooms and the diet kitchens are so located as to reduce nurses' travel to a minimum, thus enhancing the efficiency of the nursing force. For

cases of doubtful classification a detention room has been provided adjoining the admitting room. Separate bathing and dressing units are provided for (a) incoming patients, (b) patients about to be discharged, (c) doctors and (d) nurses.

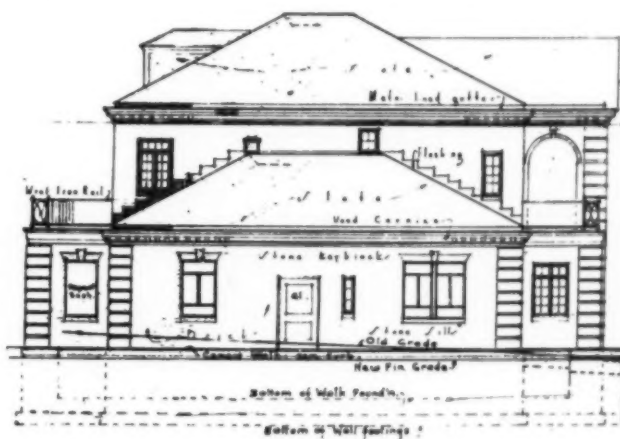
Hospital visitors will enter a visitors' lobby where there is no risk of contact with patients. An observation platform encircles a considerable part of the building, and from this mothers may be permitted to see their children without entering the building.

Flexibility of Plan Is a Feature

As the number of patients fluctuates from season to season, it will be possible to open and close separate sections of the patients' floor according to need. During an epidemic it will be possible to devote one-third or two-thirds of the entire floor to patients suffering from the prevailing disease, at the same time keeping in reserve individual rooms for sporadic cases of other diseases.

The contagious wing has its own operating room, which will be available for emergencies, and a small clinical laboratory.

Various services, of which the kitchen is the most important, are accommodated on the ground floor. Here the sterilization of mattresses, linens and patients' clothes will be effected, and sterile supplies kept ready for use. Adjoining the kitchen,



The southern end of the building is shown here.

on the ground floor, are dining rooms for nurses and help.

The second floor of the building, which is considerably smaller than the patients' floor and which can be reached without contact with patients or with hospital service proper, is devoted exclusively to the living quarters of the nurses. Open air decks adjoin the nurses' bedrooms.

The plans for this building as finally developed reflect the experience and judgment of the hospital authorities and the hospital staff, as well as the experience and technical knowledge of the architects and the consultant. The aim has been to produce a practical contagious hospital unit, harmonizing in architectural treatment with the other structures that go to make up the Wilmington General Hospital.

National Standard of Naming Diseases to Be Put Into Use Shortly

A national standard of naming diseases is being prepared at New York City by the National Conference on the Nomenclature of Disease, with which the United States Public Health Service is cooperating.

Each disease and its various aspects will be designated by numbers. Following a meeting of the executive committee of the conference recently, on which the Public Health Service is represented, it was announced that the conference would assemble on December 14 in New York City for the purpose of adopting the new terminology of diseases, which then will be put into use in various hospitals throughout the United States for one year's trial.

After the year of trial is completed, the conference will assemble again to make final corrections in the new methods of designating diseases and to adopt it for general and permanent use.

Scores of scientific specialists and medical organizations and committees are cooperating now in the preparation of the new standard. At the present time, many of the various hospitals use their own special methods of naming disease, and a definite standard of terminology is "badly needed." The new standard will make it possible to compare reports of various institutions, hospitals and other medical units, which at present is difficult because of the variety of terms used to signify the diseases, according to the explanation offered by the Public Health Service.

This new terminology of disease will be of greatest value in the compilation of statistics on diseases and in the work of comparing disease re-

ports made by various hospitals and units in different sections of the country, where, at present, different forms of nomenclature are used.

Each disease, to be designated by a number, will signify by such a designation its various aspects and causes. For instance, if a number of six figures, such as 1, 2, 3, 4, 5, 6, is used as the term for a disease, each of the digits in this number will signify some fact related to the illness. Thus, in the example given, the number "1" probably may designate the actual name of the disease, while the second number, "2," will show the cause.

The new plan has been sought for a number of years. Previous attempts to build up a new disease nomenclature for general use throughout the country have resulted either in direct failure or in the formation of a terminology that eventually proved too unwieldy for general use.

Financial assistance provided from the Commonwealth Fund has aided the present work of the National Conference on the Nomenclature of Disease, which two years ago was initiated by the New York Academy of Medicine.

The Obligations and Duties of a Staff Physician

That a physician assumes definite obligations when he accepts an appointment to serve in a hospital is the thesis of an article by Dr. Richard C. Cabot, professor of clinical medicine and professor of social ethics, Harvard University, in *Nosokomeion*. Doctor Cabot feels that it would be a great advantage if a list of the obligations and duties of hospital physicians were written out and agreed to between the managers of the hospital and each member of its staff, at the time of his appointment, instead of this matter being allowed to remain in the region of tacit understandings.

Such an agreement should include: the physician's duties to his patients, such as (1) duties of medical technique, (2) duties of personal kindness, proper reserve and proper frankness and (3) the duty of instructing his patient about his disease and especially about his share in his own treatment; to medical students and others who receive instruction in the hospital; to medical colleagues, assistants and interns; to social workers, nurses and other lay assistants; to the general public, through adequate printed reports of the hospital's work, its aims, its successes and its failures; to the world of science—the duty either to carry on research or to afford opportunity and credit to others for this.

How to Ensure High Standards of Medical Service

By A. C. BACHMEYER, M.D.

Superintendent, Cincinnati General Hospital, Cincinnati

THE absence of a definite policy concerning the extension of the privilege of the hospital to physicians or surgeons may be the source of much difficulty and grave concern.

Hospitals to a large degree are dependent upon the good will of the public for their successful operation. One of the most effective measures in obtaining that good will is the establishment and maintenance of a reputation for efficient, prompt and kindly service to the patient. In this the physicians and surgeons who practice in the institution are vital factors. Courts have ruled that boards of management of hospitals must exercise diligence in the selection of their agents. It may be argued that the physician, whether a staff member or not, in caring for a private patient is not acting as an agent of the board and that therefore the latter has no responsibility and need have no concern as to his competence. Nurses and technicians, however, are required to perform such service for the patient as the physician may order and so even though he may not be their agent the board on this ground is legally interested in the competence of every physician or surgeon who practices in the hospital.

The board of management which is anxious to conduct an institution in which the patient's every interest shall be properly safeguarded, in which the benefits of modern medical science shall be available to every patient and which shall merit the highest regard of its community, has every reason to prescribe regulations that will guarantee the best standards of medical and surgical practice.

Who Shall Practice in the Hospital?

The question, then, of who shall be privileged to practice medicine or surgery in the hospital is a vital one and one that the board cannot delegate to any subordinate authority. The question is also a vital one to the professional staff of the institution and to other physicians and surgeons who may have been accorded the privilege to practice in the hospital or who may be desirous of obtaining that permission. It is also of prime im-

portance to the patients who may enter the institution and consequently to the entire community.

The American College of Surgeons has formulated requirements as to the qualifications and character of the surgeons who shall be admitted to practice in any institution that it will approve. As indicated in an address by Dr. C. Jeff Miller, New Orleans, president, American College of Surgeons, before the annual hospital standardization conference of the college in Philadelphia, which was published in the April issue of THE MODERN HOSPITAL, the individual fellows of the college through their membership have assumed responsibility for the quality of the surgery done in the hospitals in which they practice.

Identifying the Competent Physician

The membership of the American College of Physicians is not so large as is that of the American College of Surgeons and this association has not set up a code of requirements for physicians in general. For their own membership the requirements are strict. In other special fields of medicine, associations have been organized that have formulated definite requirements for membership. These have for their purpose the identification of the member as a competent practitioner in the special field.

While membership in one of these several bodies may indicate the competence of the physician or surgeon or at least the fact that he has had special training and experience, there are many competent men who do not hold such membership. The general tendency in the medical profession is toward some form of distinction that will indicate fitness to practice in a special field of medicine. At the present time, however, it is impossible to solve this question by requiring that all physicians or surgeons who are admitted to practice in institutions belong to one or more of these associations or hold certificates indicating special preparation for practice in a given field.

As has been said, the responsibility for the choice of physicians rests solely with the board of management. However, as the board is usually

composed of nonmedical men, its members cannot have the first-hand knowledge necessary to arrive at a proper decision. It is suggested, therefore, that with the aid of their executive and of the medical staff they adopt a definite policy that will provide them with such knowledge and guide them in their decisions. It must not be forgotten that the question is not only who shall but also who shall not be granted the privilege of practice in the institution.

The Functions of the Staff Committee

Assuming that the medical staff of the hospital has been carefully chosen and is composed of those men in the community who are properly fitted by education and experience to practice in their chosen fields, it is suggested that the staff be required to select a committee from among its members whose duty it shall be to advise the board concerning every physician or surgeon who applies for the privilege of practicing in the institution.

Each physician or surgeon should be required to file a formal application before such a privilege is extended to him. His application should definitely set forth his training and experience in the special field or fields in which he desires to practice. Such an application should also contain the names of colleagues who can testify to the applicant's moral and ethical character as a physician. It should be the duty of the staff committee to examine the application, interview the applicant, particularly if he is unknown to the members of the committee, and definitely satisfy themselves as to his fitness or otherwise before submitting a report. Their report and recommendation should be made to the staff at a regular meeting and the staff should then submit its recommendation to the board for final action.

It is further suggested that the board might extend the privilege of practice to the applicant during a probationary period of definite duration. During this time, the staff committee should be required to maintain careful supervision of the applicant's work and should be prepared to make a definite recommendation at the close of the period.

It is my understanding that this method of dealing with the question has operated successfully in a number of hospitals. In some, the applicant who desires to do major surgery or operative obstetrics is required, in addition to filing an application, to perform surgical procedures in the presence of the committee. In other instances every applicant is placed on probation and during this period, the records of his patients are subjected to careful study and analysis.

To some, this method may seem severe and un-

democratic. There are those who may claim that it represents an interference with their rights and privileges under the laws of the state which grant the privilege of independent practice to those who comply with certain state requirements. The competent and understanding physician, however, will recognize the need for safeguarding the hospital's, and more particularly the patient's, interests and will gladly comply with regulations prepared for that purpose. The institution that rigidly adheres to a definite and strict policy in this regard will be supported by its community and will merit the good will of the public and the medical profession. The adoption of and adherence to a general policy of this type will avoid the embarrassment and difficulty of making a decision in an individual case in which there may be doubt or even just cause for negative action.

The older men on the medical staff must shoulder the responsibility of maintaining a high standard of professional service. The entire staff and the board must realize that the reputation of the hospital cannot rise above the repute of the physicians and surgeons who practice in it.

If hospitals are to continue to merit the favorable opinion of the public that they now generally enjoy, they cannot take the attitude that if the patient desires the ministrations of a certain physician or surgeon it is none of their concern, even though he is known to be incompetent. The hospital must ever hold the best interests of the patient foremost.

Though a single method for handling this problem has been detailed, it is not my intention to set up any claim that this is the only satisfactory or successful one. I believe, however, that there should be a definite policy in this regard in every hospital and that success lies in a strict adherence to that policy that will guarantee the highest standards of professional service on the part of all physicians and surgeons privileged to use the institution.¹

Army's "Flying Hospital" Cares for Emergency Cases

The United States Army's largest and fastest "flying hospital" is a plane that accommodates three patients in basket litters. It has a 525 horsepower engine and a speed of about 150 miles an hour. Besides the pilot, the ship carries a flight surgeon and one attendant. It is equipped to care for emergency cases, especially for persons injured in aviation accidents.

¹Read at the meeting of the Ohio Hospital Association, Cleveland, April 28, 1931.

Hospital Administration as Seen by a Hotel Executive

By WALTER BAKER

Vice-President, Ambassador Hotel Corporation, New York City

TOO often one hears the hospital and the hotel compared. While there may be a similarity between the two, there is a danger that the public will gain the wrong idea of both unless the statement is qualified.

It must be admitted at the outset that both have guests, both have feeding problems (although they are not the same problems by any means), both have heating, lighting and plumbing problems that are akin and a host of other routine duties in common, but it should always be remembered that

the philosophy behind the two is dissimilar and that there is a marked contrast in serving the voluntary guest as is found in hotels and the involuntary guest such as is found in hospitals.

Nevertheless each can learn much from a close study of the other. The first-class modern hotel which is organized for profit has been brought up to its present day standard by the demands of a traveling public and has been literally built upon complaints. Had it not been for the complaints that hotels received twenty years ago, had it not



Entrance to the Italian Garden, Ambassador Hotel, New York City.



A delicately carved marble fountain and ornaments, an etched glass lighting fixture and plants and vines arranged in a pleasingly natural manner create a delightful outdoor spot for the guests of this hotel.

been for the keen competition that exists to-day between hotels and had it not been for the fact that the public is always going from one city to another, from one hotel to another and hence comparing good and bad features, the perfection of service found in any city hotel would be lacking. It is on this theme that I should like to discuss hospitals and what they can learn from hotels.

To my mind, the difference between the management of a hospital and a hotel exists primarily in the training of executives. While the hotel man may not possess the educational background of the average hospital superintendent, yet because it is absolutely necessary for him to make his hotel pay, he has learned every phase of the business of serving the public.

The late E. M. Statler started his career as a bell boy and worked diligently until he was recognized as one of the outstanding men in the hotel field. No complaint that came to him was new for he had faced them all as a minor executive fighting his way up and he knew the answers. Another famous host started his career as a Pullman dining car steward, and there have been many who have found their way up from the kitchen to the administration of the hotel. To-day Cornell University has a course in hotel administration which requires the students to spend much of their time as workers in various parts of the hotel, peeling potatoes, doing repair work, as porters, as bell boys, as clerks, as helpers for the chefs and stewards, and in the engine room. How many

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Hospitals can learn much from hotels in the furnishing and decorating of their private suites and board rooms. The beautifully furnished room shown here is the dining room in a private suite of a New York hotel.



hospital superintendents in the country have ever shoveled coal, stood all day picking and cutting chickens, waited on table, acted as orderlies, worked for a day or a week or a month in the admission department or indeed worked in any part of the institution?

I expect the answer that will arise in the minds of most readers is that menial work is not necessary for successful administration, but I will stand by the statement that the hotels that are being most successfully managed have at their heads men who have worked their way up or who have spent considerable time as workers in the various departments. One of the best known hotel men in the country sent his son to a hotel in New York City for a year where he could be found

burnishing silver, helping in the repair shop and doing every job possible. Only when he had finished this training did the father feel that his son was competent to deal with the personnel of a large hotel. The importance of courtesy, of prompt service, of cleanliness, of a proper attitude toward all guests and of other major points in administration has been learned this way and then passed down to others in the hotel.

Training of the personnel to a point of pride in courteous service has long been an outstanding feature of our hotels. We choose our clerks, bell boys, waiters, maids and others for their intelligence, their neat appearance and their ability to be genuinely courteous without being subservient. Hospitals could and should do the same thing.

Maids, orderlies, student nurses, desk clerks, elevator operators and office employees should all be rigidly trained to meet the public and to treat the public in a friendly and polite manner without becoming either maudlin or mechanical.

Let me give a comparison. When a guest comes to The Ambassador, he is greeted pleasantly by the door man, his baggage is taken by a neat appearing and "anxious to please" bell boy. The reception clerk who assigns the rooms calls the guest by his name as soon as he learns it, and from then on the bell boys and the clerks take pains to remember the guest's name and address him by it on every occasion. If the guest should have some of his meals in his room, the waiter learns the guest's name before answering the call and so addresses him when he comes for the order. So do the valet, the maids and in fact every employee who comes in contact with the guest.

The one thing we have to guard against in this phase of our work is to see that the employees do not become too mechanical in their greetings. It is fairly easy to parrot a "good morning" or a "please" which often irritates the guest, and this of course must be avoided. In hospitals, on the other hand, the maids and orderlies and often the nurses themselves take no interest in the patient's name, and the result is that the service they perform becomes purely routine and never personalized. Hospitals could well take a leaf from the hotel man's book on this score.

Perhaps you have noticed that the telephone operator in the well operated hotel is polite and affable, calls you by name, and gives you a cheery "good morning" and never under any condition does she answer you shortly or discourteously. Hospitals are improving on this score but they have not reached the perfection that hotels have.

Perfecting the Food Service

The next point is the food service. I realize that the problem of serving food in the hotel does not compare with serving food in the hospital, but it may be interesting to learn how much effort is put into the food service at our hotels. In the first place, the kitchen is run with military precision and all department heads—the chef, the steward, the maître d'hôtel and all of the lesser dignitaries—are trained to work in a cooperating group of servers, with only one thought—the ultimate satisfaction of the guest.

No food is to be poorly served under any conditions. Hot plates, dish covers, the proper timing of service, experienced preparation and all other things are considered. If a guest complains rightly or wrongly, the real or fancied grievance becomes a matter of prime importance and a cor-

rection is made immediately and apologetically. The head waiter or the captain of a station supervises the rectifying of the mistake and does it pleasantly. A record is made of the complaint and it is traced to the one responsible, because it is a rule that every guest who enters the doors of the Hotels Ambassador must be thoroughly satisfied with his stay. To this end the entire organization works. Is this true in the average hospital?

In speaking of the kitchen, one naturally thinks of food buying and the purchasing department generally. The hotel manager keeps a close supervision of this department and every effort is made to see that only the best of foodstuffs is purchased, and that graft is eliminated.

Differences and Similarities

In the purchasing for the hotel other than the daily supply of foods, the manager is the one who decides every question. While I fully appreciate that for sanitary reasons the scope for attractive furnishings and decorations in hospitals is limited, there must be some way to make these places a little more attractive. The red plush sofas in the "parlor" and the horse hair furniture in the bedrooms went out of the hotels with the hoop skirts, but the same old treatment of bedrooms, corridors and public rooms is evident in hospitals.

Why isn't it possible to use colors and brighten things up a bit? Hotels have had to make their rooms more attractive to meet competition; perhaps the lack of competition is what is keeping the hospitals back.

Please remember that I fully realize that the guest in the hotel is in most cases a well person who is going to pay his full bill, while in the hospital the patient is a sick person who may or may not pay all the bill, or any of it. We have no charity rooms, we have no part-pay rooms and we must turn a profit each year. Hospitals are in a different position. All of them must do a certain amount of free work if they are to hold the respect of the community, they must often cut their rates to fit the purses of the patient and they must render a multitude of surgical and medical services totally unknown to the hotel.

On the other hand, I believe that the hospital can do a great deal that is being ignored to-day toward satisfying the patient. Greater attention to courteous treatment by all of the personnel, a closer supervision of all departments by the hospital superintendent, an earnest striving to eliminate all complaints and the fostering of a better feeling between the hospital and the public are topics that should be studied by every hospital administrator. With reservations, the hospital can learn thousands of ideas from hotels.

Ways to Remove the Stigma Attached to Mental Illness

By C. B. FARRAR, M.D.

Director, Toronto Psychiatric Hospital, Toronto, Ont.

TO DISCUSS the relationship of the mental hospital to the general hospital is really to open the much broader question of the relationship of psychiatry to general medicine. A backward glance reminds us that in earlier years at least the relationship was not all that could be desired. Indeed, the story of the methods that society has used in the past in dealing with its mental invalids suggests that the question was not so much one of relationship as one of almost complete estrangement.

Latterly, however, psychiatry and medicine have been drawing together. On both sides has the purpose been manifest to narrow the breach and make the relationship more intimate, perhaps more through the insistence of psychiatry than through the overtures from general medicine. Nevertheless this gap, the last serious one between any of the medical sciences, is not yet wholly closed. Disguise or deny it as we may, it is still there. It persists in the manner of treatment and disposal of patients; it is apparent in the viewpoints of medical men themselves and it is notoriously noticeable in the attitude of most general hospitals toward the reception of mental cases. It persists in popular sentiment and prejudice; it persists in social and legal usages and traditions.

We may safely start, then, with the premise that the relationship between psychiatry and other departments of medicine, improved greatly as it has been within recent years, may be still further modified and improved with advantage to all concerned.

"Nervous" and "Mental" Cases

There are many sides to this question, but I shall touch upon two only, service and education.

Consider first the usual response of the general hospital when application is made for the admission of a mental patient: "No mental patients received, 'nervous' patients, yes, 'neurologic' patients, yes, but 'mental' patients, no," sometimes with almost too much stress on the "no." And it is curious to note that even private sanitariums, whose obvious function is to take care of all sorts

of psychiatric disabilities, sometimes advertise: "Nervous cases treated; mental cases not received." That does not mean that there are no mental cases in these hospitals. It means only that the patients enter under the euphemism of "nervous," which is held to be a somewhat better title than "mental."

The General Hospital's Attitude

The official attitude of the general hospital is likewise misleading. In its wards mental patients are also found. In neurologic services and in private wards we may observe paranoid types, praecox types, neuroses, depressions, excitements, almost anything with which psychiatry deals. The only difference between the types of psychiatric disability that are treated in the general hospital and those that we find in the psychiatric or mental hospital is the distinction of degree. In the psychiatric hospital we find the same types of mental illness but in severer forms. It is not a question of distinction based on clinical differentiation, it is a question of degree only. Thus is support lent to the popular fallacy that the psychiatric patient with mild outward manifestations is only "nervous," while the same patient manifesting severer symptoms has become in some mysterious way "insane."

I suggest that general hospitals might profitably revise their code in these matters. It may not be out of place to refer to one hospital where the situation is frankly met both in theory and in practice, namely the Henry Ford Hospital, Detroit.¹ Seven years ago this general hospital began the experiment of receiving all types of mental patients on precisely the same basis as other patients in the medical and surgical services. The psychiatric ward consisting of twenty-four single rooms is identical in layout and construction with the other wards in the hospital. Even the windows with their large unprotected panes are the same. The use of this type of window might be criticized

¹Heldt, The Functioning of a Division of Neuropsychiatry in a General Hospital. *Amer. Jour. Psychiat.*, November, 1927; The Treatment of Mental Diseases in a General Hospital, *New York State Jour. Med.*, January 15, 1930.

but, on the other hand, it is manifestly undesirable to vary the construction in a ward that is so intimately a part of the complete plant. Temporary window stops, permitting limited opening, are sometimes used; otherwise, in physical arrangement and general equipment the psychiatric ward is in no way distinguished from the other wards. All kinds of mental patients are received, including the two types that the general hospital is least inclined to admit, the actively maniacal and the suicidal case.

Dispensing With Legal Formalities

Most noteworthy of all, however, is the fact that there are practically no legal formalities in connection with the psychiatric service at the Ford Hospital. As far as the law is concerned patients are voluntary in the same sense that patients in the medical wards are voluntary. In neither one case nor the other does this necessarily mean that the sick person comes to the hospital of his own accord and applies for treatment. His family may seek admission for him because he is ill and requires care they cannot give, and the acceptance of this responsibility by the hospital is regarded as evidence of good faith on both sides. It is estimated that not more than 3 per cent of their patients come in on court orders. Except for this almost negligible number, therefore, these patients are under no legal restriction or disability, and it is worthy of remark that the hospital has never been sued and that no habeas corpus proceeding has ever been instituted.

It is true that in certain cases legal formalities and guarantees cannot be dispensed with. That such machinery is inevitably necessary is not true and the traditional notion of "legalizing" treatment of the mental patient is largely the echo of an earlier day, of the prisonlike asylum and of improper tampering with personal liberty, such as Charles Reade described in his "Cloister and the Hearth." That day, however, has happily passed. The public is gaining confidence in its hospitals. An effective way to increase that confidence is to simplify admission procedure to the utmost and to make it as nearly uniform as possible for all types of disability, physical or mental.

A significant suggestion has been offered by Dr. J. Allen Jackson,¹ superintendent, Danville State Hospital, Danville, Pa., to the effect that vacant beds in general hospitals might be utilized to relieve the overcrowding that exists in mental hospitals. In addition to the primary purpose Doctor Jackson indicates three other desirable ends that may be achieved by this measure, namely, increas-

ing the revenue of general hospitals, fostering mutual relations between the two types of institution and facilitating research in mental disease. Whether or not such a proposal is feasible at present, the mere fact that it is seriously put forward is gratifying evidence of the trend of opinion.

The large general hospital that does not provide treatment for psychiatric cases is not completely fulfilling its function. Such provision may require either a small ward as part of the general layout, which will permit proper segregation, with ample facilities for hydrotherapy, or, as an alternative, a separate self-contained unit in close proximity to the other departments of the hospital.

We come now to the other side of this question, namely, the educational aspect of the inter-hospital relationship. This comprises the training of both medical students and nurses, but we shall here consider only the latter.

A moment's comparison of contemporary methods by which on the one hand a doctor is produced and on the other, a trained nurse, will I believe reveal an anomalous situation, which should in time be corrected.

For medical students, whether they become general practitioners or specialists there is a more or less standardized type of training. Each must be first of all a physician grounded in the fundamentals of medicine, including some knowledge of the specialties. The specialist becomes a specialist by postgraduate work in his selected field.

Why a Double Standard of Training?

The prospective nurse, on the contrary, has at the outset two paths open, training in a general hospital or in a mental hospital. The standards of these two courses have always been dissimilar, in preliminary requirements, in methods of training and in results, and it is largely true that each type of training has provided incomplete preparation for the graduating nurse. The general nurse may have had little or no psychiatric training. She lacks the invaluable experience of a period of actual ward service in a mental hospital. On the other hand, the mental nurse has wholly inadequate training in the various medical and surgical subjects, which constitute the bulk of the general hospital nurse's work, a deficiency that certain mental hospitals now endeavor to make up by affiliation courses.

It may seem almost an anachronism that this double standard of training for nurses should exist. That the two originally wholly independent systems should have arisen was, however, a matter of necessity. If we recall the formerly almost impassible barriers between physically sick per-

¹Jackson, J. Allen, Can the 35 Per Cent Vacant Beds of General Hospitals Be Used for Research, Diagnosis and Treatment of the Mentally Ill? *Bul. Amer. Hosp. Assn.*, July, 1930.

sons and the mentally ill, it is self-evident that the institutions devoted to the care of the latter were literally compelled to train their own personnel. Only recently have some of the general hospitals opened their doors to the affiliated nurse from mental hospitals.

To meet the situation in which they found themselves by hard necessity, the institutions for the mentally ill instituted training courses patterned as far as their facilities would allow upon those of the general hospital. The two types of training have been steadily drawing closer together. How long will it be until the final step is taken and there is a single plan of teaching and experience for all undergraduate nurses?

How the New Plan Would Function

Under such a plan the nurse would begin and would receive the bulk of her training in a general hospital. In the larger and better organized hospitals there would be psychiatric wards on which all nurses would have their term of service. Psychiatric instruction would also take an important place in the curriculum. The elements of mental hygiene would be presented in the first year. With such teaching facilities the general hospital graduate would probably have as much knowledge of mental cases and their treatment as she would require in her work.

In order to give additional experience and to provide for the needs of general hospitals lacking psychiatric wards, affiliations with existing mental hospitals would be necessary. By this arrangement groups of general hospital undergraduates would be assigned for duty of not less than three months in mental institutions, during which time they would receive theoretical and clinical instruction in psychiatric nursing.

Such a system would promptly bring to light nurses with special aptitude for psychiatric work. For them postgraduate work should be available in psychiatric wards or mental hospitals. These specialized nurses would have several attractive careers open to them, including the enlarging field of private mental nursing, executive and teaching positions in psychiatric clinics and hospitals and mental hygiene work in numerous other extramural undertakings.

It may be asked whether facilities are available to-day to provide affiliation in mental hospitals for all of the nurses in general training schools. To answer this question a survey was made of conditions in Ontario. There are in this province thirty-seven general hospitals with 100 beds or more which conduct training schools. The aggregate number of nurses graduating last year from these hospitals was 744. How could this number

of nurses be given training in psychiatric nursing work?

We may select arbitrarily seven of the strategically placed mental hospitals of the province as suitable to provide the necessary affiliation. The aggregate number of pupil nurses in these seven institutions last year was 430. As is well known many mental hospitals still employ a large number of men attendants, many of whom would of necessity be replaced by nurses in training as soon as an adequate teaching program could be developed. With this accomplished the 430 pupil nurses might easily increase to 600 or more. The mental hospitals would obviously require a reasonably large permanent organization in their nursing services so that not all of these 600 positions would be open to affiliates from general hospitals. Suppose that only 300 or 400 such positions were open. It is evident that they would provide twice over for all of the affiliates from the thirty-seven general hospitals mentioned, whose 744 pupils would be divided by four, thus allowing at one time groups of 186 nurses to receive three months' service in the mental hospitals. The question is not therefore one of accommodation, but solely one of the development and coordination of teaching programs and the standardization of hospital operations.

Under the plan here proposed, certain mental hospitals affiliated with general hospitals as instruction centers would no longer provide training courses intended to cover the whole field of nursing, as most mental hospitals still try to do, but would instead confine their teaching to psychopathology, psychiatric nursing, mental hygiene and the allied subjects that constitute their proper domain. Nurses in training would be graduated from general hospitals only. A necessary condition to graduation, however, would be ample experience in handling nervous and mental patients, gained in psychiatric wards or in mental hospitals. Nurses completing a prescribed amount of postgraduate work in special training centers would be entitled to an advanced diploma in psychiatric nursing.

Results of a Unified Training Program

Changes incident to this arrangement might have to be effected gradually. The reorganization would affect principally the mental institutions where a relatively larger permanent nursing staff would be required than in general hospitals, in order that the service to patients might not suffer through the coming and going of pupil nurses affiliated for comparatively short periods.

An inevitable consequence of the unified training program would be an equalization of standards between the general and the mental hospital.

Progress has already been made toward this goal but much remains to be done. Inevitable also would be the eventual disappearance of the attendant class as a part of the nursing service in mental hospitals. The desirability of this step has been amply demonstrated wherever it has been taken, and yet the policy, survival of an outgrown epoch, of staffing men's wards with men attendants, largely untrained, is still too widely prevalent and demands correction.

In this brief discussion we have touched upon only two major points in the relationship of the general to the special hospital, one having to do with service and the other with the education of nurses. The changes outlined will, I believe, improve that relationship and go far towards making it what it should be. Through such a unified policy the welfare of all patients requiring institutional care, whether for physical or for psychic disabilities, will be materially promoted. By this means also we may reasonably hope to overcome prejudice in the minds of both the public and the medical profession with respect to mental illness; and so at length close the last serious gap in the theory and practice of medicine.¹

A Middle-Rate for Hospital Patients —A Year's Experiment

The questions before the public in the matter of medical care are summarized in the conclusion of a report on "The Middle-Rate Plan for Hospital Patients," published by the Julius Rosenwald Fund. The report, written by Mary Ross, New York City, gives the gist of a year's experiment by the physicians and hospitals of Keokuk, Iowa.

The plan initiated in Keokuk provided a lowered schedule of hospital charges and physicians' fees for families of limited means. The money was paid to the hospital, which then paid the doctor his share. If credit could be established with the hospital's admitting officer, the bill could be paid on the installment plan. The aim was not to provide charity but an amount and method of payment within the means of middle-class patients and fair also to hospital and doctor. The plan was discontinued in February, 1931, when the medical staffs of Graham Hospital and St. Joseph's Hospital informed the administrations of the hospitals that they opposed a continuation of the plan. The Julius Rosenwald Fund had cooperated, at the request of the hospitals, by agreeing to pay a share of any loss due to lack of occupancy of the beds set aside for this service or bad debts, and by pay-

ing the half-time salary of the admitting officer who interviewed patients and turned over the facts of their incomes and obligations to the doctors and hospitals for the decision as to whether or not they were entitled to the lower rates established by the plan.

The report finds that the administration of both hospitals favored continuing the plan, as did well known citizens and business men interviewed by the author. Opposition came from one group of doctors, and did not include several of the leading members of the profession.

The opposing physicians' objections to the middle-rate plan may be summed up under four headings: (1) Patients who were served by the plan could have paid more than they did; (2) the plan was designed and managed to serve the interests of a small group of Keokuk doctors as against the remainder; (3) it was unfair to physicians in neighboring towns because the lower rates attracted patients from their communities; (4) it infringed upon the doctors' prerogatives by having rates fixed through agreement with hospitals and patients instead of by the physician alone.

The report discusses each of these criticisms, giving facts obtained from the hospital records and from personal interviews. The average income of the families, most of which were of good size, was \$21.95 weekly or only about \$1,140 a year, assuming continuous employment. In reply to specific questions, moreover, the physicians interviewed cited only one of the 164 cases accepted under the plan.

A study of the records of a physician who was alleged to have "unfairly" profited by the plan showed that he had not increased the number of his patients during the operation of the plan as compared with the preceding year, but that he had been able to hospitalize a larger proportion of his obstetrical cases instead of caring for them under less favorable conditions in their own homes.

Rates Should Have Been Fixed

In conclusion, Miss Ross declares: "The basic and insistent objection was that the amount which the patient was to pay should have been fixed by an agreement in which the patient and the hospital had a part instead of being left to the discretion of the doctor alone. There is here a final and fundamental question: Is the physician's charge to be determined solely by himself, limited on the one hand by his private generosity, on the other by his willingness to take as much as the patient can pay him at any sacrifice? Or is this aspect of distributing medical service susceptible to a co-operative arrangement that can be discussed and agreed upon by doctor, hospital, and patient?"

¹Read at the annual convention of the Ontario Hospital Association, Toronto.

We, the Grading Committee, Recommend—

By MARTHA DREIBLATT

Committee on the Grading of Nursing Schools, New York City

MORE than 10,000 hospital superintendents, heads of nursing schools, trustees and other men and women who direct nursing education recently received a green covered report, "Results of the First Grading Study of the Nursing Schools." It is the final one of a series of three reports that have been sent to each of the participating schools since last July. The first national survey of the nursing schools is completed.

To make this survey the Committee on the Grading of Nursing Schools gathered, tabulated and interpreted facts concerning more than 1,400 schools. It found out the age, education, typical daily schedule of some 60,000 student nurses; how 15,000 graduates of the class of 1928 were prepared for the work they are doing to-day; the salaries, duties and turnover in employment of hospital superintendents and of 23,000 graduate nurses employed by the hospitals, and many other matters vital in nursing education and in the nursing service of hospitals. We now have for the first time much needed facts on which to base opinions concerning the whole picture of nursing education.

A Full-Length Portrait of Each School

One important thing these studies do is to give each school an account of itself. Put the three reports of a school together, study the red ink checks that mark the pages, and one obtains a full-length portrait of that school. Such self-study alone is valuable. The first report showed the New Jersey schools that they placed their state in the third lowest rank in the comparison of educational background of students. Thirty-three schools raised their entrance requirements. The figures here spoke for themselves.

As these pictures of the schools were looked at collectively by the grading committee and the hundreds of records analyzed, a series of recommendations and suggestions as to what should be done grew out of them by an almost natural process. This, it seems to me, is the second important result of this survey of nursing education, for some of

the problems it revealed are more intricate than the one referred to. It is not so easy to see at first glance what should be done about them.

During the years of its work, training school executives besieged the committee with such questions as, "Which are the fifty best schools?" "What grade will my school make?" "What standards are you setting up?"

Few Schools Meet Tests Creditably

In an article in the February issue of the *American Journal of Nursing*, Dr. May Ayres Burgess, director of the work of the grading committee, pointed out, "It is literally true that of the 1,397 regular accredited schools of nursing covered by the first grading study, there is not a single one which ranks in the first quarter in each of the grading comparisons." She selected six comparisons for a test grading, standards simpler than many that nurse educators have often proposed. Taken individually, each is met by at least half the schools studied. Yet only twelve schools survived all six!

Visiting two hospitals on successive days recently, I realized once more what a world to itself each one is. Each has its individual problems, its daily emergencies, to meet. Its rushing activities, including the training of its student nurses, are shaped to meet these individual needs. Each has its own traditions, its own methods. Nursing education to-day is an immensely complicated matter. More than 2,000 institutions are involved. Also, it is interwoven closely with the nursing service of the hospitals. In one-fourth of the institutions students give more than four-fifths of the nursing care. Any changes in school policies affect the nursing service, just as any changes in nursing service profoundly influence the school.

For these reasons, the committee could not class fifty, or even 150, schools as "best," grade the schools in definite rankings or set up hard and fast standards that would take no account of individual differences.

The recommendations it does make are flexible. The records of each school went into their shap-

ing, and, as I have said, they grew out of the facts. They also represent practices that have already been tried and found valuable, which if generally adopted would lead to a uniform high level of achievement in the nursing schools.

They are printed at intervals throughout the reports. I have summarized them in the following paragraphs. Taken together, they form a working basis from which busy hospital and nursing school executives can quickly gauge the reports of their own schools from the point of view of the objectives at which to aim, as indicated by their individual findings.

Physical Facilities

1. The nurses' home should be a modern fire-proof building, detached or semidetached from the hospital and used exclusively for nurses. It should provide such accommodations and facilities as are most conducive to the physical, social and educational welfare of the nurse. This presupposes individual rooms with running water and proper air, light and furnishings, recreational, library and study rooms and, unless provided elsewhere, adequate educational facilities.

2. Classrooms should be well lighted and ventilated, and should have sufficient blackboard space, charts, models and other equipment.

3. There should be a demonstration room with ward equipment, running water, gas plates and work tables.

4. There should be a laboratory with simple standard equipment and a diet laboratory.

5. A definite monthly budget for the purchase of books and a reading room adjacent to the library should be provided. Books should be readily accessible to students.

The building of fine nurses' homes has been going on rapidly for the past few years. As yet, however, only 47 per cent of the 1,304 schools reporting say they are fully satisfied with students' living quarters. Good living accommodations are highly important as a means of attracting desirable applicants to the school and in maintaining student morale. Superintendents may find the grading committee's recommendation a good picture to hold up to their trustees in discussions of students' homes.

A dietitian once told me she seriously considered leaving her position because she lacked even the commonest kitchen utensils in her laboratory equipment and could not properly conduct her classes. That this should have occurred in a large metropolitan school shows the need for checking on such equipment to make sure the teachers' time and the money paid them are not being wasted.

The library is playing an increasingly important

rôle in the training school. A good library is one index to the quality of the school.

The Staff

1. The administrative staff should be adequate. The larger schools especially should not depend on the one-woman type of organization.

2. The superintendent of nurses should not carry a heavy teaching load.

3. At least one regular instructor and preferably two or more should be employed. The instructor should not be expected to spend more than four or five hours daily in classes or to carry executive duties not related to her work. It is advised that one person should teach the principles and practice of nursing as her chief work.

4. An adequate well qualified staff of graduate floor duty nurses should be employed, (a) to ensure that the patients have proper care; (b) so that students may see examples of good nursing; (c) so that students may be freed from an undue burden of the nursing load and have time to practice good nursing; (d) so that students may be freed for classes when necessary, without danger to patients; (e) so that students may be assigned to nursing duties on the basis of their educational needs, not according to the day to day needs of the hospital.

5. There should be graduate head nurses only. They should have adequate preparation for their teaching and administrative duties.

6. Each member of the nursing staff should be regarded as a teacher and encouraged so to regard herself.

7. To ensure good nursing and a good morale a study of how to reduce turnover should be made. The committee further suggests that opportunities for advancement and a wider salary range might help in reducing turnover. This does not necessarily mean higher salaries but more marked differences in those offered for respective posts, to create an incentive toward betterment in the staff.

Schools grow, but often their administrative and teaching staff does not. Some of the schools still require the superintendent of nurses to be the cook and the captain bold, the mate and midshipmite. One superintendent reported that she was principal of the school, day and night supervisor, head nurse, purchaser, housekeeper and also teacher of six subjects, including the principles and practice of nursing. She is not unique. More than two-fifths, or 590, of the schools studied as yet have no regular full-time instructor. The average number of subjects per instructor is more than six.

The problem of turnover is one of the most serious in nursing service administration. Half

the night supervisors and floor duty nurses in the schools studied have held their present positions less than one year; half the supervisors, instructors, dietitians and heads of special departments have held their positions one year or less. The suggestion of how to help reduce turnover is in accordance with a principle that is successfully used in business organizations.

The number of graduate floor nurses in the hospitals is increasing. It was found, however, that the typical hospital of 150 to 199 patients has eight floor nurses, when head nurses on the floor are included. The typical hospital with from 250 to 299 patients adds but one more. Fifty-five per cent of the hospitals had no graduate floor nurses on duty on the day studied.

Adequate floor nursing staffs are the only answer to the problem of reconciling the principle that the patient comes first with the fact that students work in the hospitals in order to learn. Testimony from hospital patients in "Nurses, Patients and Pocketbooks" shows how bitterly they feel concerning the lack of sufficient nursing care and the lack of experienced nurses to care for them. Here is a cornerstone on which good nursing service and good training must be built.

A friend of mine, returning from the hospital, praised the enthusiasm that student nurses who cared for him showed in their work. I asked the superintendent the secret. "It all depends on the head nurses," he said. "We employ only graduates, and those of the highest type."

Is this rule always followed? Of 8,092 head nurses, one out of five was a student. One hospital out of ten had no graduate head nurses at all. These hospitals have fallen far below the standard in an important and rather generally accepted practice in nursing and in educating nurses for their work.

Theoretical Experience

1. A sound basis in nursing sciences should be given near the beginning of the course, with classroom instruction to continue throughout the course.

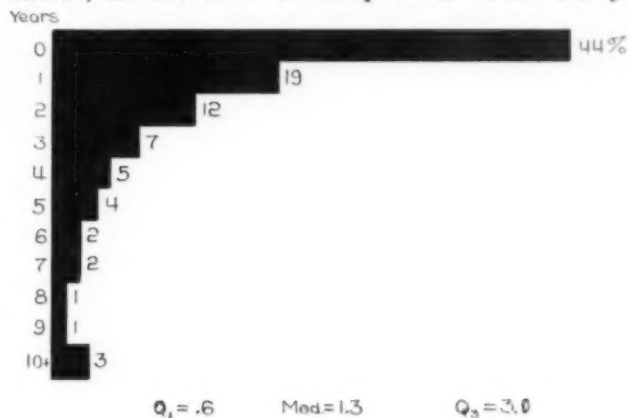
2. Theory and practice should be carefully correlated, so that instruction either precedes or accompanies each new type of clinical experience.

3. Time should be spent in laboratory work, demonstrations, reviews and written and oral quizzes, in the teaching of such subjects as anatomy, physiology and bacteriology. Lectures alone are not considered sufficient.

4. All students should get all the work. Schools with less than sixty students are particularly advised to see that classes are repeated as often as is necessary.

5. Physician lecturers should be selected on the basis of their ability to teach. The committee believes that the principle of paying for such instruction is sound.

The committee has not formulated standards in regard to subjects and hours, since it believes much study is still needed in this respect. It has, however, used the curriculum of the National League of Nursing Education, which is commonly considered the desirable standard by nurse educators, as the base of comparison in its study.



In this chart showing the years nurses have held their present positions, of 18,510 nurse faculty members, 44 per cent have held their present positions less than one year; 19 per cent, one year; 12 per cent, two years. Only 25 per cent of the faculty members have held their present positions for as much as three years. Members of religious Sisterhoods are not included in this count.

Of every 100 schools studied, ninety-two plan to give less than the 885 hours of theory suggested by the league curriculum. One-half go more than 200 hours below this standard. Often in practice even fewer hours of theory than have been planned are given.

The Student Body

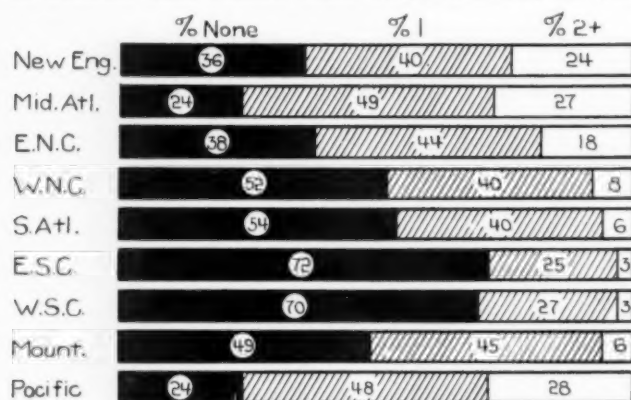
1. The educational background of students should be carefully considered both from the point of view of the responsibility of the hospital in placing its patients in the hands of intelligent persons and in its responsibility in graduating nurses intelligent enough to care for the patients.

2. Schools admitting either very young or very old students should make sure they are of promising enough material to make up for the difficulties involved in teaching a student body showing wide disparities in age.

3. Health examinations should be given not only at entrance but also during the course.

4. Hours of work, especially hours of night duty, and vacations should be carefully considered from the standpoint of the student's health, both as an obligation the school owes the student and as a means of maintaining a healthy nurse personnel.

The four-year high school diploma is rapidly becoming a minimum entrance requirement. Yet only one-half of the schools show that two-thirds or more of their students met this requirement. Can schools afford to be known as the type that welcomes high school failures? In a large group of schools that raised their requirements, 90 per



This chart shows the percentage of schools in each geographic division having no regular instructor, one regular instructor or two or more regular instructors.

cent state that they attracted a better type of student and many report an increase of applications.

Sick students cost the hospital money. As yet, probably at least 450 schools give not more than one health examination to students during the entire course. Certainly the provision of adequate health care is a good "talking point" to attract students from the better homes.

Adelaide Nutting, well known nurse educator, once said that long hours have for twenty-five years been one of the greatest drawbacks to the proper education of nurses. Gradually hours of duty have been shortened. Twelve-hour night duty is decidedly waning. As yet, however, eight-hour night duty is not typical. Far too large a number of the schools still have more than eight hours of day duty also, and eight-hour day duty usually does not include class time.

Affiliating Schools

1. No hospital should undertake to operate a regular school of nursing unless it can give at least two years of sound diversified experience in the home school.

2. Affiliation for clinical experience should occur only in the second or third year of training, never in the first.

3. A full record of the work done by each student during such periods of affiliation should be kept on file at the home school as part of the student's scholastic record.

4. Schools that send their students away for affiliation should ask themselves whether they are

giving a sufficient proportion of the basic course. The committee further suggests that, whenever feasible, hospitals located near each other should centralize certain portions of classroom instruction and practical experience.

Of 1,437 schools fully two-fifths, or more than 580, send their students to other institutions for part of their training. These are basic principles that apply to them.

Clinical Facilities

1. Every school connected with a hospital with a daily average of seventy-five or fewer patients should carefully consider whether it is providing the sorts of educational advantages that any other profession would consider as basic essentials.

2. All schools should consider not only the number of patients but whether they present nursing problems that offer an adequate clinical background for their students.

3. The number of students should not exceed the number it is possible to provide for in the smallest of the basic services.

4. The larger hospitals should make sure they are not putting an undue pressure of nursing responsibility upon the student.

5. Schools with less than thirty students should be sure that they are maintaining adequate classrooms, a sufficient number of instructors and other educational facilities.

The grading committee does not set up definite standards as to the size of the hospital and school, since it believes that much further study is needed on the subject.

From the first the committee was asked, "Do you intend to abolish all the small schools?" The committee has not been concerned with size *per se* but with the size of the hospital in relation to the kinds and amounts of clinical experience it offers; the size of the student body as it affects the number that can be accommodated in the respective services and the possibilities of providing good teaching facilities; the ratio of students to patients as it affects the nursing load the students must carry. The last is a key factor in considering whether students will have a chance for proper education.

One out of four of the 1,229 schools studied is connected with a hospital having forty-two or less patients as its daily average; eighty-four have twenty patients, and some have less. What clinical experience are these schools offering students?

Doctors to-day often demand nurses who have a thorough training in caring for many varieties of patients besides those who are found in the usual surgical and medical wards. The American Medi-

cal Association recently stressed the need of nurses trained to care for mental patients. The *Queens County Medical Bulletin* for April editorially gave its support to the movement to have experience in communicable disease service included in the basic training required by state law for registered nurses. At present about six out of ten student nurses are not getting it. Training schools must consider how to educate their students to meet these demands. The customary minimum requirement for a training course is adequate experience in medical, surgical, operating room, obstetric and pediatric services, and service in the diet kitchen. The word adequate is important, for while the larger number of the schools provide some experience in these and other services, those that give a sufficient amount of training in them are far less.

At the outset of its career, the grading committee went on record as follows:

"The decision as to whether or not a school of nursing should be conducted in cooperation with a given hospital should be based solely upon the kinds and amounts of educational experience which that hospital is prepared to offer."

Practical Experience

1. For teaching purposes, segregated services are preferable to mixed.

2. All courses in ward practice should be planned in advance and given as planned.

3. Variations in amount of experience in each service between one student and another should be slight and should be based on the needs of the student, not on the hospital needs.

4. Students should not stay on any service after they have ceased to learn from it, nor should they be kept so long on one service that they are prevented from gaining experience on other essential ones.

5. Bedside clinics in the wards, conducted by the head nurse or supervisor, constitute one of the best methods of teaching.

6. All assignments should be truly educational in nature and should not be attempts to find easy solutions for administrative problems.

7. When students are used as specials, (a) the assignment should only be one that has educational value and the student should be withdrawn when the educational value ceases; (b) such service should not be charged for; (c) the student should not be on the case more than eight hours of the twenty-four; (d) relief should be provided so that she may attend classes as usual.

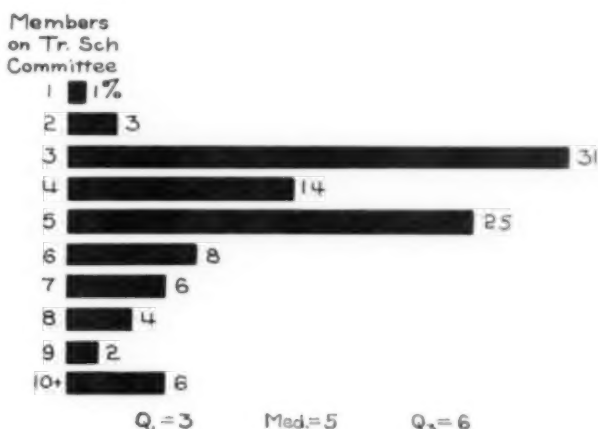
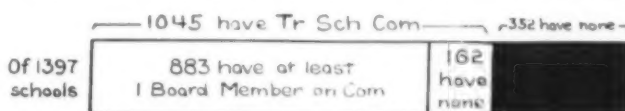
8. In general, training for the position of head nurse should begin only after the student has completed her undergraduate work. When for special reasons a school feels it wise to offer a head nurs-

ing course as an elective to certain students, the committee recommends: (a) that they should have completed well balanced training in each of the fundamental services; (b) that they be allowed to practice as head nurses only in services where they have satisfactorily completed basic training; (c) that they report to and be under the direct supervision of a graduate nurse supervisor, other than the superintendent of nurses.

9. Records should be kept in detail for each student, showing where she is on duty, hours of duty, class work and night duty.

10. Hours of work and the size of the nursing staff should be considered in relation to the value of the practical experience given students.

Much study is still needed, the grading committee believes, before definite standards as to the kinds and amounts of necessary practical experience are arrived at. As a basis of studying the records submitted to it, it used the curriculum of the National League of Nursing Education as the one commonly considered most desirable by nurse



The upper bar shows that of 1,397 schools, 1,045, or 75 per cent, have training school committees, while 352, or 25 per cent, do not. Five-sixths of those with such committees have at least one board member on the committee. The lower bar shows the percentage of training school committees of each specified size. One-fourth have three members or less; half, five members or less, and one-fourth, six or more members.

educators and employed by many schools to guide their work.

In the test grading according to six minimum standards referred to previously, it was found that many even of the large and famous schools that survived the first five comparisons were eliminated when judged on the basis of the variation of the amount of experience in each service between one

student and another. This is another key test of sound educational practice.

A study of the school records revealed that students in the same school showed a difference of more than six months in time spent in the operating room service; in the obstetric service of another school the range was 342 days. Some students in certain schools received no training in this service. Of each 100 typical students, thirty-two received the standard two months of operating room training; fifty-five received more, some exceeding it by more than six months. Other services showed similar wide variations in the time spent in them by students.

Regulating Practical Experience

On the other hand, a number of schools showed as little as four days' difference in the time spent by their students in the various services. This seems to show decidedly that practical experience can be satisfactorily regulated by careful planning and strict adherence to such plans in the face of all temptations to change them.

Good records constitute a necessary basis for mapping out the schedule of the student's practical work. The grading committee's findings afford ample evidence that while some schools keep the clearest of records others, time after time, could not be included in the studies of practical experience because they could submit no records or submitted confused ones.

After the preliminary period is over, about eleven-twelfths of the student's time is spent on the wards. It is from the work she does in the hospital that the institution derives the most benefit from its training school. It is in this work most of all that nursing schools must be sure they are giving students value received.

Before considering the final group of the grading committee's recommendations, let us review those already given. They hold that a nursing school should be connected with a hospital offering adequate facilities in clinical experience and in theoretical instruction. Students should be carefully selected, should be given proper living quarters and their health should be safeguarded. The course should include thorough basic practical and theoretical training, with the chief objective the graduation of a fine type of nurse, prepared to meet the increasingly heavy demands made upon nurses for skill, intelligence and the ability to give to patients the care that modern medical science calls for.

These recommendations are the outgrowth of one principle—that nursing schools are educational institutions and should be established on an educational basis. That the adoption of one

recommendation necessarily leads to the adoption of others is significant. Adequate teaching will often mean shortening hours so that students may derive the full benefit of the teacher's knowledge and more careful consideration of prospective students from the point of view of their ability to grasp the instruction given.

Some school administrators will need to check very few of these recommendations as applicable to their own future policies. They already put most of them into practice. Others will see that the very size and type of the hospitals to which they are attached do not permit of such fundamentals of clinical experience as are here advised or that to maintain the proper teaching facilities would mean more overhead expense than they can afford. Some schools have already discontinued instruction, in the face of the rapidly rising level of nursing education in general. A large group of the schools will find that a thoroughgoing revision is necessary if they are to join those in the upper ranks and equal their standards.

As Doctor Burgess points out, the mere recognition of the need for change is not enough. In a comparison of the present survey with the study made of the schools in 1923, she shows that such basic faults in education as long hours, inadequate clinical experience and inadequate staffs of graduate nurses were found then and are found now.

What the Committee Recommends

What are the steps by which needed changes can be brought about?

1. A cost study of the nursing service and the training school. The procedure of such a study is outlined in Section 3 of the grading reports. By it a hospital can clearly determine whether it is making or losing money through the school. As the report points out, the fact that a hospital saves money by having student nurses does not necessarily imply exploitation. "It only becomes so," it goes on to say, "when the hospital, by limiting or interfering with the students' opportunity for sound professional growth, fails to repay the contribution of the school by making possible thorough nursing education."

Another of the principles the committee sets forth at the beginning of its work is worth noting here: "The fact that a hospital is faced with serious financial difficulties should have no bearing upon whether or not it will conduct a school of nursing."

2. A definite educational budget. Eighty-seven out of 100 schools at present do not budget their expenses.

3. An arrangement whereby the board of trustees requires the head of the school to be present

at board meetings whenever matters affecting the nursing care of patients and hence the practical experience of students are to be discussed.

4. An active training school committee. "Such a committee should probably have from five to ten members, one of whom should be the superintendent of the hospital; at least one a member of the hospital board; at least one a member of the medical board; at least one should be drawn from the field of public education, and the remaining members should include such other people as best understand the nursing needs of the community and the educational needs of a profession."

"Tell the Training School Committee"

An analysis of the negative and positive trustee appears in a recently published book.¹ The positive training school committee is important to the nursing school. Members of training school committees doubtless would often be happy to take an active part in the school's work, but they know too little about it to turn their interest into action. A technique for a continual current of communication between them and the school would energize its life enormously. "Tell the training school committee" might be a good slogan for school administrators. We all like to work hard for something when we are made to feel a responsibility for its welfare.

5. An appeal to the public for funds for the nursing schools. A good school costs money. It will cost money to put some of the grading committee's recommendations into effect. How are other professional schools supported? Through public funds. A third principle the grading committee has adopted is: "No hospital should be expected to bear the cost of nursing education out of funds collected for the care of the sick. The education of nurses is a public responsibility."

If a budget is established for the training school, appeals to the public can be forcefully presented. We have community drives for playgrounds and little theaters. Why not drives for training schools? How many people really know about their hospital's training school? Yet it is an intensely dramatic activity successfully to educate young women for fine careers and to raise the community's standards of health by providing it with well trained nurses. I have seen men and women deeply moved at a graduation exercise. These emotions could be harnessed to do fine service for the training school.

Why was the grading committee brought into being? First, because nurses in their daily experience saw the urgent need for a revaluation of

nursing education. The schools and hospitals voluntarily joined the study because they saw the need for changes and wished to know the facts on which to base them. Then, though doctors and patients are in a large measure satisfied with the nurses they are getting, there does exist a serious proportion of dissatisfaction among them. Quotations in "Nurses, Patients, and Pocketbooks" show clearly the legitimate dissatisfaction many patients feel with the nursing care they receive in hospitals and the care they receive from nurses whom they employ themselves.

We all know that nursing care may mean life or death. Ten unqualified nurses should cause serious concern. Ten lives may be lost because of them.

The hospital's first responsibility is the welfare of the patient, not only of every patient within its walls but of every patient in the community. If it is to care for them properly it must provide them with good nurses. The only way to do this is through proper education of nurses.

From the heartening way in which so many schools and hospitals cooperated in the grading study, spending much time in making their records available, and from the evidence that the schools have already begun to put the grading committee's findings into use, great things can be expected to result from their action on what this survey shows should be done.

The Ideal Record Librarian —A Composite Picture

"The person required to conduct a medical record department must be a combination of secretary, clerk, medical dictionary, encyclopedia, general information bureau, memory wizard, mind reader, slave driver and diplomat."

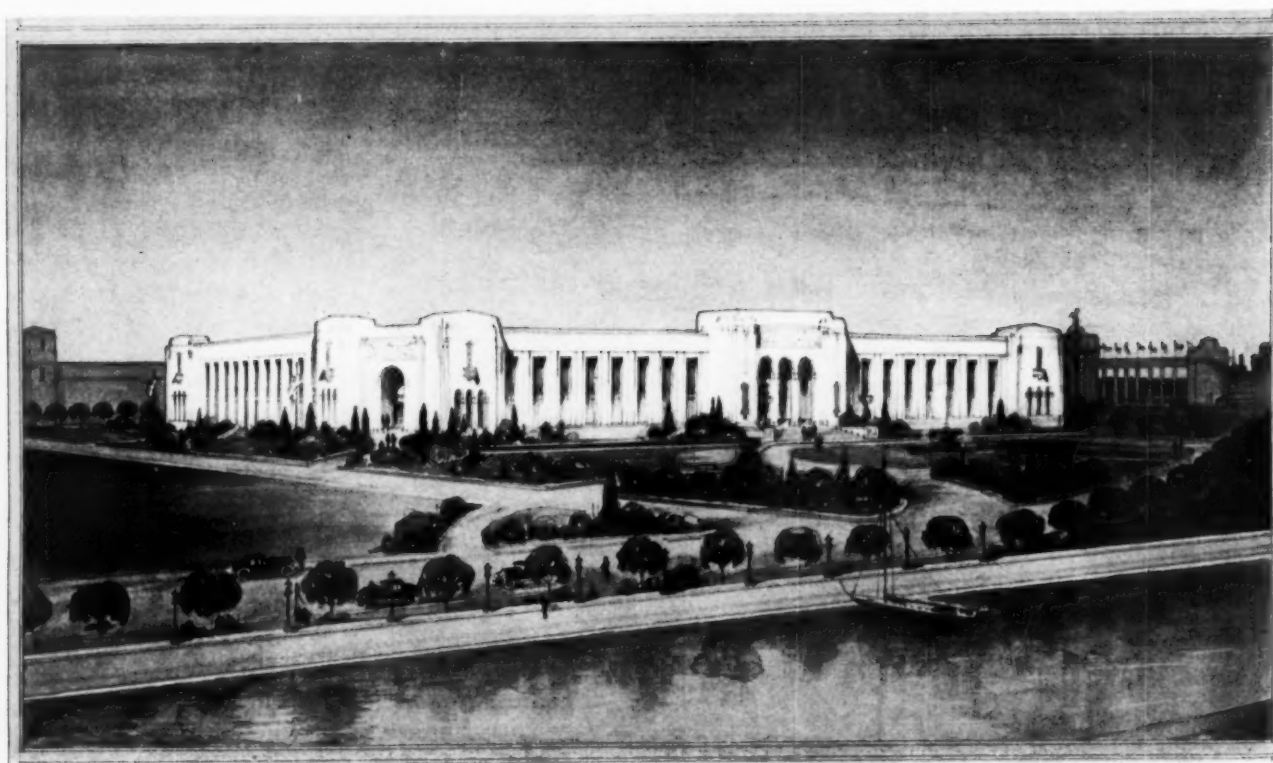
This, in effect, is a composite picture of the record librarian as presented by Elizabeth Cooper, record librarian, Orthopedic Hospital School, Los Angeles, in a paper read at the meeting of record librarians with the Western Hospital Association in Oakland, Calif.

For the person who aspires to the position of record librarian, Miss Cooper pointed out that a knowledge of the following subjects is essential: theory of record keeping, filing and indexing; anatomy and anatomical terms; medical terminology and nomenclature; appraisal of charts; compiling monthly and yearly reports and any statistics within the range of her medical knowledge; relation of the record department to all other departments of the hospital, individually considered; the legal relationships of the hospital.

¹McNamara, John A., What the Hospital Trustee Should Know, Physicians' Record Company, Chicago.



The first unit of the new addition to St. Joseph's Hospital, Toronto, opened in 1930, is shown at the left. This hospital is operated by the Sisters of St. Joseph. The American Hospital Association meetings will be held in the new Automotive Building, pictured below.





Toronto Western Hospital, a teaching unit of the Toronto Medical School, has a bed capacity of 500.

Toronto Promises Varied Scenery and Age Old Hospitality

GOING to Toronto will be much more than attending another annual meeting of the American Hospital Association. It will, or at least should be an event that will be pleasurable and profitable, and if the "tired hospital administrator" will only go in the proper spirit and will take a few days before or after to bask in the joys of Canada, the trip will not be soon forgotten.

When the association chose September 28 as the starting date for the big meeting, and the Protestant Hospital Association took the three preceding days, it was indeed a happy choice since the delegates will see Canada, all parts of it, in its very best dress. The scenery from one coast to the other is at its best; the rivers, lakes, mountains and cities are all resplendent at this particular time of the year, and the citizens, always famous for their hospitality, are even more hospitable. In the West are Lake Louise and Banff; in the East are Quebec and the Laurentian Mountains, while between lie quaint villages, huge fields of wheat and thriving industries. For those who like Continental Europe and European scenery, all portions of the province of Quebec are recommended, particularly the city of Quebec. For those who favor the British idea of scenery and style any part of Ontario with its lakes, streams, hills, dales, wide paved highways, and scores of attractive cities reproduces it. In

addition, the province of British Columbia, especially the island of Vancouver and the city of Victoria, should not be missed.

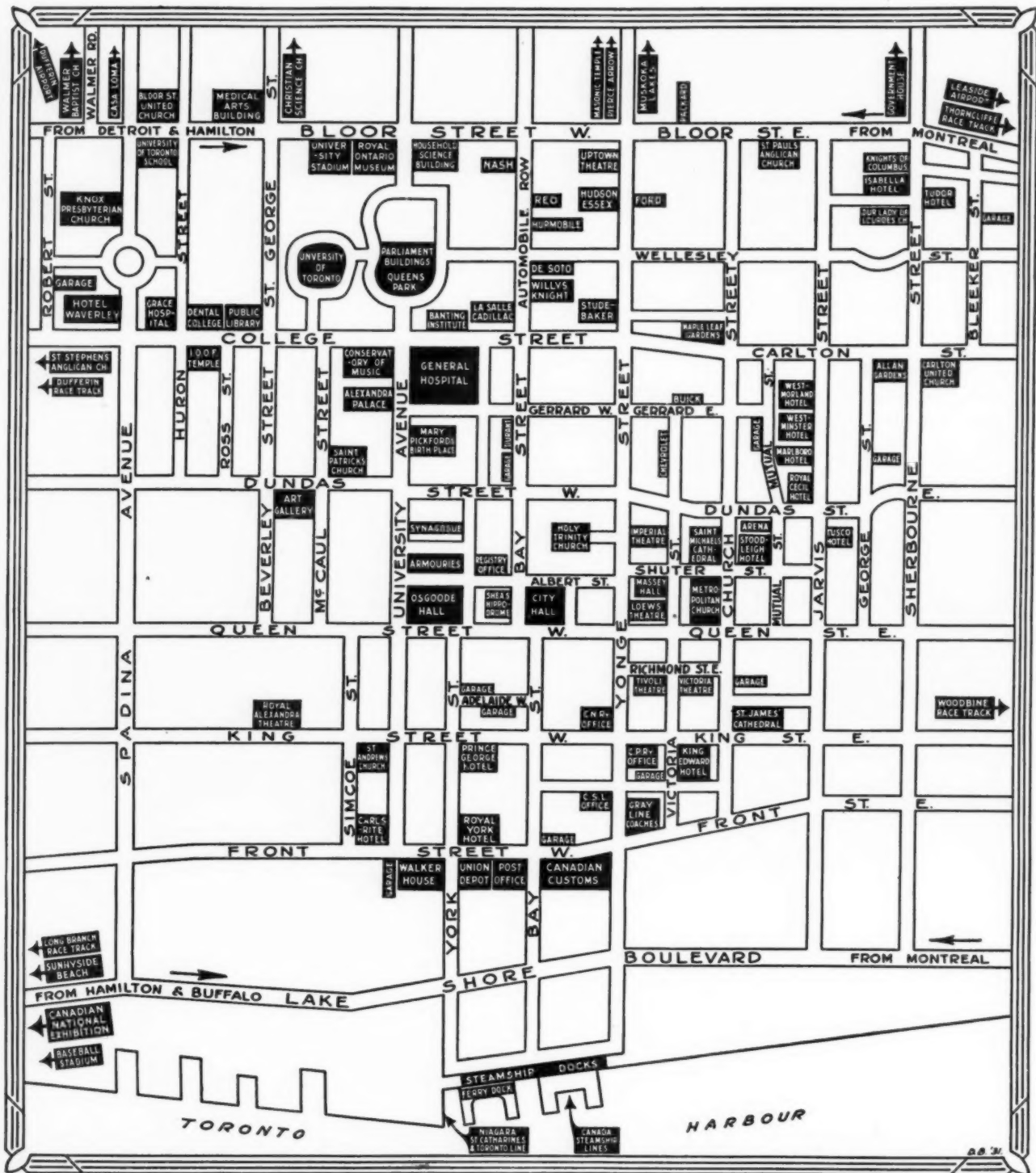
Toronto is Canada's great convention city, as well as Canada's most important commercial and industrial center. It has a population of 850,000. It is well governed and is to all outward appearances similar to Detroit and Cleveland, a thoroughly modern city. Its beautiful residential section and tree lined streets make it a city of unusual attraction. All residences are of stone or brick. Toronto has an attractive business and financial district, scores of beautiful office buildings running up to thirty-five and forty stories, two of the world's largest departmental stores and an abundance of specialty shops showing the latest creations in women's apparel from France, England and the smart shopping centers of the United States. Toronto's fur shops and diamond houses are interesting. Toronto has two fine hotels, each with a thousand rooms or more, and a score of other beautiful hotels ranging in size from 750 rooms to the small homelike 100-room hotel. There are over 7,000 hotel bedrooms available. The smaller hotels prove a revelation in service to the American visitor since they keep alive the English ideal of a small hotel as a place of comfort.

A novelty at which the American is inclined to

smile is found in the helmeted policemen, but the smile changes to one of wonder and admiration when these men, the most of whom are English or Irish, reply to questions and explain traffic rules as if they had all the time in the world and as if the visitor is the most important person they will ever meet. With this one exception, the American visiting Toronto will not find the city or citizens any different from those in any large American city. Toronto also claims the distinction of being

the best lighted city on the continent, as well as having a fine and efficient street railway and motor coach system.

United States citizens are permitted to enter Canada without a head tax, a birth certificate or other identification. Motorists, however, must have the state license card for the car they are driving to show the Canadian customs officer at the port of entry. The passing of the customs takes but a few minutes and visiting motorists



Map of Toronto, showing the principal hotels, hospitals and points of scenic and historical interest.

will find Canadian customs officials kind and courteous. United States visitors are permitted to bring in forty cigars and 100 cigarettes without duty. Popular brands of United States cigarettes cost considerably more in Canada than in the United States—Lucky Strikes, for instance, cost forty-five cents in Canada, the reason being the

Huron, Mich., from Niagara Falls and Buffalo, N. Y., and from Montreal to Toronto. New Englanders may drive as far as Ogdensburg, N. Y., and ferry to Prescott, Ont., thence over the Toronto-Montreal boulevard. The speed limit in Ontario is thirty-five miles an hour on the highways and twenty miles an hour in the cities and towns. The



Riverdale Isolation Hospital is a civic institution operated by the Toronto Department of Health.

duty on tobacco. The average cost for Canadian cigarettes of the best quality is twenty-five cents for a package of twenty.

On returning from Canada to the United States each visitor may take back duty free articles to the

parking restrictions in Toronto are similar to those in any city. Signs mark the restricted areas. Automatic "Stop" and "Go" lights cover the city. Red means stop, green means go. The motorist may turn right on the red or the green light, and left



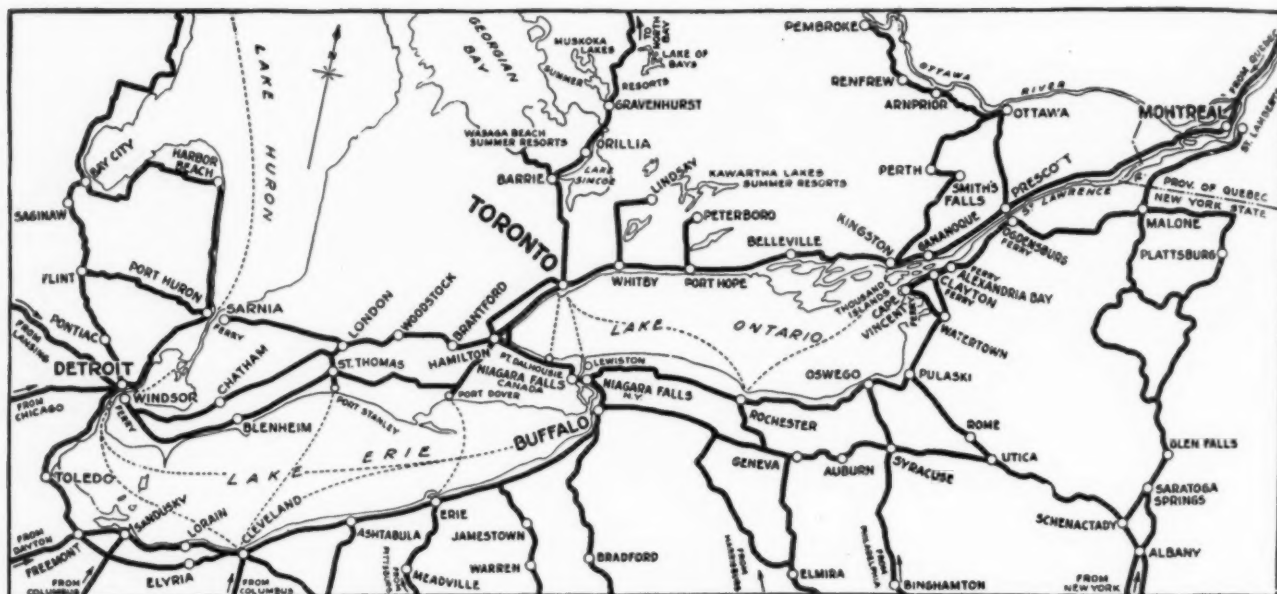
The Toronto Hospital for Consumptives, established in 1910, has a capacity of 260 beds.

value of \$100. Many things may be purchased in Canada to advantage, for instance, diamonds, woolens, furs, English china, English Burberry coats, English makes of shirts and ties and smart, up-to-date clothing of English materials. All the smart women's apparel from France may be purchased in Canada at considerably lower prices than in the United States.

Motorists may enter Canada for a ninety-day tour, no Canadian motor license being required. There are paved highways from Detroit and Port

on the green only, unless the street is marked "No Turn." Fireproof garages will be found close to all the hotels. The motorist may drive directly to his hotel and an attendant will take his car to the garage.

The Royal York Hotel, which has been chosen as headquarters for the American Hospital Association, has 1,200 rooms and is considered one of the best convention hotels in the world. Owned and operated by the Canadian Pacific Railway, it stands at Front and York Streets directly opposite the



The map shows Ontario's principal highways and their relation to the larger cities and points of interest of the East and North. The lower picture is a view of the proposed new \$750,000 structure to be erected for the Women's College Hospital, an institution staffed entirely by women physicians and interns.

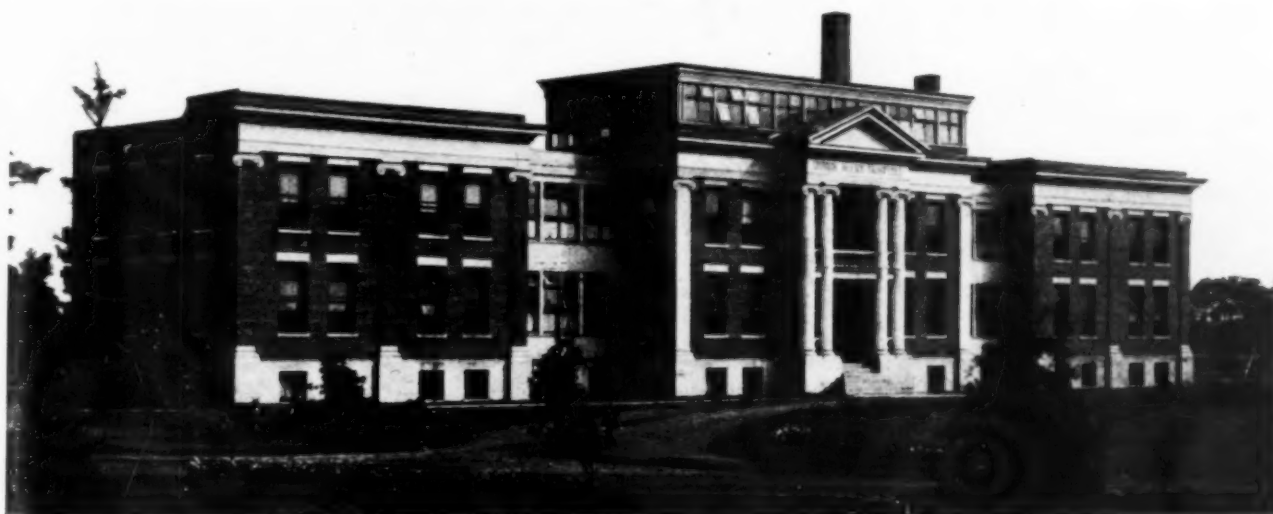




Toronto's largest institution for caring for the sick, the general hospital, shown above, has 1,054 beds. Consumptive children in the Canadian city are cared for at Queen Mary's Hospital, shown in the lower picture.

Union Depot. A tunnel runs between the depot and the hotel. The King Edward has 1,000 rooms, and is classed among the fine hotels of the continent. It is owned and operated by the United Hotels Corporation, and is on King and Victoria Streets.

Both of these hotels are between a four and five minutes' drive from the Automotive Building, where the exhibit and meetings will be held. There are many other excellent hotels and restaurants in Toronto, some of the popular United States res-



restaurant chains having branches in the Canadian city.

The Automotive Building stands in the Canadian National Exhibition Grounds and is quickly reached by street car, motor coach or taxicab. Street car tickets are four for twenty-five cents. The coach fare is twenty-five cents a person. Plenty of parking space is available close to the Automotive Building. Civic club members will be interested to know that Rotary International meets at the Royal York Hotel on Friday at 12:30 noon, International Kiwanis at the Royal York Hotel on Wednesday at 12:30 noon and International Lions at the King Edward Hotel on Thursday at 12:30 noon.

Those who enjoy the sport of kings will be interested to learn that the Ontario Jockey Club holds its annual autumn meeting at the Woodbine Track from September 26 to October 3. Horse lovers from all parts of America will be found wending their way to Toronto about that time.

Many General Hospitals Have Beds for Mental Patients

Questionnaires sent to 600 hospitals asking for information concerning the existence of clinics and psychopathic wards or departments where examination or treatment might be given to mental patients were sent by the National Committee for Mental Hygiene, Inc., of New York.

Of the 421 hospitals that replied, 122 reported special facilities; 17 reported incidental services. Fifty-three of 56 hospitals that have special wards reported 3,298 beds for mental patients.

Of the 122 hospitals having special facilities 56 have special mental wards; 97 have clinics; 31 have both wards and clinics; 25 have wards only; 66 have clinics only.

How Nurses Are Distributed Among Various Services

More than half of the nursing profession, dominated by women, are engaged in private duty, while the remainder is about equally distributed among public health work, institutional service, and other types of service, according to Walter J. Greenleaf, specialist in higher education, United States Office of Education. There are at the present time three nurses to every two physicians.

Nursing within a quarter of a century has risen to the status of a profession. Now regarded as a definite health service, 96 per cent of those engaged in nursing are women.

Many changes in the last thirty years in medicine, surgery, dentistry, hygiene and preventive measures have taken it from the bedside to many occupations associated with health.

Nursing is now divided into four large groups. It is either practiced as a private duty, an institutional duty, in the form of public health service, or as a government service.

When practiced privately it is performed for private persons in hospitals or homes. As an institutional occupation, it is practiced in hospitals, charitable homes, reformatories and various institutions. A hospital may include staff nurses, superintendents, educational directors, principals, instructors, supervisors, head nurses, operating room nurses, general duty nurses, dietitians, anesthetists, laboratory assistants, technicians and even occupational therapy aids and hospital social service workers.

Public health nursing is subdivided into many phases. There may be district nurses (visiting nurses) to call at the homes, municipal nurses and others. Public health nurses are employed by state departments of health and education, state tuberculosis associations, visiting nurse associations, infant welfare associations and various social organizations.

Over 5,000 nurses are now employed in the public and private schools of the nation. There are rural nurses for the remote areas and industrial nurses for the factories of the cities. Missionary nurses are found throughout the world. Red Cross nurses act in emergencies at the request of the surgeon general. Over 200,000 were supplied during the World War.

Government service in its many ramifications has attracted many nurses. There are public health nurses, veterans' bureau nurses, navy and army nurses.

Nurses are generally paid from \$35 to \$45 a week. Average earnings amount to about \$1,300 yearly. Income varies according to the special skill of the nurse and the nature of her employment. In government service the salaries vary in the army from \$70 to \$130 per month with maintenance, to \$2,700 annually as chief nurses in the Public Health Service less deductions for room, board and laundry in respect to the latter.

Education is stressed more than formerly. About 54 per cent of the graduate nurses have had four years of high school training while 15 per cent have been to college. Of the 1,884 nursing schools, accredited by state boards of nurse examiners, 1,137 are nonsectarian, 228 Protestant, 343 Roman Catholic and 176 under other types of control. Nevada is the only state in the United States without a nurses' training school.

Practical Administrative Problems:

Determining the Cost and Efficiency of the Nursing Service

By JOSEPH C. DOANE, M.D.

Medical Director, Jewish Hospital, Philadelphia

IN PAST numbers of THE MODERN HOSPITAL, there have been discussed in this department a group of subjects that bore directly upon the business of making and saving money for the hospital. While it has been repeatedly stressed that the main object for which the hospital exists is the proper care of the sick, it is just as certain that a necessary requisite for the successful prosecution of this aim is the existence of ample funds. Moreover, as a corollary to providing good service and in direct proportion to the accomplishment of this end are the creation and maintenance of a creditable hospital income. And yet that there are exceptions to this rule is being proved in many instances during these present times of financial stress. All things else being equal, however, the better the service rendered, the more satisfactory the income.

It is my purpose to depart somewhat from the policy that has been followed in the past few months and to comment on the cost and efficiency of nursing. Special topics will be discussed with the aim of learning more concerning the comparative excellence and necessity of certain services viewed in the light of their relative cost. It may be said at the beginning that good nursing is largely a relative and often an abstract quality and is difficult to define. A service that may appear satisfactory and efficient to one may appear far from creditable to another.

A Complicated Problem

The opinion of the public as to the adequacy of the hospital's medical and nursing care is frequently an unsafe guide. Even hospital administrators, physicians and nurses themselves are unable to more than express a personal opinion as to the requisites that comprise what may be termed a satisfactory nursing service. The personality of the nurse herself, the degree to which the personality of the patient coincides or conflicts with that of the nurse, the type of disease being treated, and the skill and definiteness of the phy-

sician are factors that must enter into this question. Few lay persons, and almost as few professional men and women, realize the intricacy and the manifold details of conducting a hospital nursing department. To many, the problem appears to possess the greatest of simplicity and consists simply of requiring that a nurse be instructed in the basic principles of caring for the sick and that she be required to be prompt, courteous and faithful. Would that the problem were so simple! The public, moreover, is apt to be immediately cognizant of the absence of these qualities and yet on the other hand is inclined to view with complaisance their presence.

What Directors Should Know of Nursing

Many hospital directors are poorly acquainted with the details necessary to the successful conduct of the nursing departments of their hospitals. Even such basic procedures as the division of the day into duty periods and the necessity that the student nurse spend considerable time at classes, recreation and rest are not fully considered in computing the number of patients for which each nurse is required to care. Executives are often greatly surprised to learn that almost as many hours must be spent in educational pursuits as in the performance of actual nursing duties. It is because of the lack of information on the part of hospital directors, executives, physicians and others that this article may find its justification.

The hospital possesses no greater asset than that represented by a good nursing service unless it is in the benefits it receives from the presence of an efficient faithful and well trained medical staff. The institution cannot do without either. Just as medical science has progressed by leaps and bounds in the past few decades, so is to-day a far cry from half a century ago when but few hospitals possessed schools for nurses and when inefficient help often was relied upon.

And so, passing completely over the develop-

mental stages by which the trained nurse has reached her present state of usefulness and yet remembering that even to-day there are many schools in which educational vision and practices are lacking, we have come to a time in which it is often said that the nurse is too well trained. The belief that the nurse is overtrained is usually the result of the observance by the critic of difficult personality traits which seem to him to indicate that she thinks herself more highly educated than is really the case. The fact of the matter is that when such an attitude exists (and this is the exception) the nurse does not know too much, she only thinks she does. A superabundance of medical and nursing wisdom is difficult to bring about. Whatever be the cause, the profession of nursing has been held up to the scrutiny of the public to a greater degree in the past half decade than ever before.

Educating the Public

Moreover, this has not come about altogether because the public particularly desired to scrutinize the motives and methods of the members of this profession, and thus to learn of their personal defects and professional virtues. The leaders in this profession have wisely desired that the public should know more about nursing, the methods necessary for securing this type of skill, the cost of living for the nurse, the amount of her income and the problems and trials that confront her. The leaders in nursing have also insisted that the public know something about the inadequacies of present day schools as well as what they have termed the lack of faith on the part of the hospital in dealing with nursing education.

The present day cost of nursing is a subject that has been discussed at great length from every angle. Those who have been particularly drawn to study the subject have learned with surprise that a seriously ill man or woman who requires twenty-four hour nursing must pay more than one hundred dollars a week to secure this service. While the hospital is interested in the outlay to the public necessary to secure such service, it is not as intimately concerned financially with this angle as it is with the cost of conducting its training school for nurses, which includes, of course, the outlay necessary to the nursing of patients and the all important by-product, the training of pupils.

When one remembers that approximately 50 per cent of the cost of conducting a hospital is required for the payment of the salaries of its personnel, it is not surprising to find that a considerable portion of this money is necessary to

provide nursing. An institution that finds that its personnel expense exceeds fifty cents out of every dollar spent should look with a critical eye on its salary and per diem pay rolls to learn whether extravagance in number or in individual recompense is being practiced. While graduate nursing service is an expensive item to the hospital, it is fallacious to think that since pupil nurses receive a small salary this is the most inexpensive group of persons on the hospital pay roll. It is true that in the average hospital, the pupil nurse receives but from ten to fifteen dollars per month and that a large percentage of this sum is required for books and similar expenses. Yet if board, housing and laundry are added to this small salary, it will be found that each pupil nurse is costing the hospital from nine hundred to one thousand dollars a year.¹ It is interesting to note that of the 2,155 hospitals in the United States that possess schools of nursing, 25 per cent have 20 or less nurses in their schools; a second 25 per cent have less than 30; another 25 per cent less than 50, and but one-fourth of the whole number have schools numbering more than 50 students.

On this basis, it is easy roughly to compute the actual outlay necessary to the hospital to educate pupil nurses and thus to provide for their presence in the wards and rooms of the institution so that the sick may benefit by the service they render.

The graduate nurse receives an average of one hundred dollars a month which, with her maintenance, amounts to approximately eighteen hundred dollars a year. It has been truthfully said that since the graduate nurse is of greater service to the hospital because of her added experience and because her work is not interrupted by having to attend classes, she is from one-third to one-fourth more useful to the institution's patients than is the pupil nurse.

"Good" and "Bad" Nursing

Notwithstanding these facts, it is certainly not economy for a hospital to possess an excess of pupil nurses and a dearth of graduates whose duty it is to supervise. Moreover, it has been repeatedly proved that a school for nurses that is well run should and does cost the hospital approximately as much as is the case when nursing is performed entirely by graduates. Here appears to be the kernel in the nutshell, since hospitals that conduct training schools for the purpose of saving money are usually those that are providing inadequate educational facilities. Hence in such an instance,

¹Nurses, Patients and Pocketbooks, The Committee on the Grading of Nursing Schools.

a lessened outlay of money represents an inexcusable deprivation of pupil nurses of their rightful intellectual opportunities.

It has been said at the outset that good and adequate nursing is a difficult commodity to define. The efficiency of supervisors; the geography of the hospital, its location, size and clientele; the vision of its staff, and the experience of the observer certainly are important factors in bringing about a "good" or "bad" nursing service. Recently those of little experience and less vision have suggested that the panacea for the hospital's difficulties lies in assigning pupil nurses to private patients and in collecting money for such a service. It is the uninformed only who state that it makes little difference in the long run whether a term of service is extended here and shortened there, provided the nurse actually spends three years in the hospital and receives a diploma. How may the executive gain sufficient information so that he may form an accurate opinion of these questions?

Choosing the Superintendent of Nurses

The superintendent of nurses should be a well balanced, businesslike person who, if she possesses hobbies, should not ride them to the detriment of the good of the patients or to further unduly the interests of her students or of nursing itself. The director of the hospital should place in her the fullest confidence. He should be able to receive from her opinions that are unbiased and that are not formed to forward the personal comforts of the nurse or that in any way indicate that she does not feel that the welfare of the patient is paramount and that the nursing experience thus secured is more than a fortunate by-product of this nursing activity.

Directors of hospitals often are not educationally minded and frequently look upon the actual service to patients as the only activity required of the pupil. The director, therefore, in endeavoring to acquaint himself with such matters as the justification of the expense of conducting the school, the adequacy of the personnel, the methods of nursing patients, the reason for class and ward time assignments, and in fact the inner workings of the school for nurses, must see for himself what is actually going on in wards and rooms during various periods of the day and night. It is not sufficient for him to observe how patients are nursed every day in the midforenoon. He must know for himself something of the business of building nursing schedules and must actually observe the workings of ward and room nursing service on many days at different hours and even during the night periods. He learns, for

example, that a curriculum such as is laid down by the national and state nursing organizations and official examining boards consists of a definite assignment of the pupil nurse to definite duties for a definite period. While all schools, for obvious reasons, are not able immediately to adopt the assignment experience periods included in an ideal curriculum, it is necessary for the directress to endeavor to approach this ideal as far as is possible.

For example, of the 1,096 days that comprise a three years' course in nursing, it may be required that 125 days, or four months, be spent in the preliminary nursing course, which comprises the elements of housekeeping, bandaging, hygiene, anatomy, chemistry, drugs and solutions, and cookery. The first year course consists of eight months or 240 days, which are spent in the study of such subjects as pathology, dietetics, materia medica, advanced nursing and massage, with definite time assignments to ward nursing. Didactic instruction in the care of medical and surgical patients and the nursing of various special types of disease with experience in the operating room, the delivery room and similar services, together with experience in wards, private rooms and diet kitchens, approximate the requirements of the national and state curricula for the junior year. In the senior year of twelve months, experience in maternity, operating room, out-patient and pediatric nursing is required, with an intensive course of didactic work covering some of the specialties, and particularly aimed to prepare the nurse for contact with the public and with the problems incident to private duty work which will soon confront her.

Individual Problems Must Be Considered

It must be remembered that in attempting to follow this skeleton curriculum, preferably eight but usually ten hours a day only are available to the individual nurse, and that in three years an allowance of at least six weeks for vacation and of some time for illness must be made. Moreover, some provision must be considered for the handling of unusual service requirements. Because the patient's good is paramount, occasionally these services overlap for short periods, although such emergencies as a quarantine, illness of the nurse or of some member of her family, and the fluctuation of requirements in various services serve to complicate the problem of fitting individual difficulties into an inflexible curriculum.

The director of a hospital, desiring to acquaint himself actually with such conditions, must therefore be fully informed concerning such basic necessities as have been sketched. Being con-

vinced of the necessity of the existence of a curriculum but desiring to observe the work of the nurse at first hand, he is now prepared to begin a serious inspection of the school itself. Whenever there is an inquiry as to the adequacy or inadequacy of the nursing personnel, the inspection usually consists largely of the computation of the ratio of patients to nurse and of an attempt to compare the nursing situation in an individual hospital with that in other well known institutions.

The accompanying table illustrates the present ratio of patients to nurses in a number of typical hospitals. It will be seen that these figures apparently do not vary greatly. On the other hand, a difference in the ratio of 0.5 patient to each nurse may easily amount to a large number of persons cared for in large institutions and may reflect itself in the expenditure of perhaps many thousands of dollars in the nurses' pay roll.

It cannot be too strongly stressed that methods of administration largely determine the number of hours spent in bedside nursing. It should always be remembered that there are many essential hospital activities such as the dispensary, the operating room, preventive medicine and public health activities, district nursing and accident and receiving ward work in which nurses spend much time that cannot be classed as bedside nursing.

The particular hospital under discussion required 32 graduate supervisory nurses, 10 general duty nurses and 129 pupil nurses to care for an average of approximately 300 patients a day. The medical department consisted of a ward for men and one for women, housing approximately twenty-five patients each, with approximately fifteen semiprivate beds. It was supervised by one graduate nurse in charge of both wards and one assistant supervisor assigned to each of the men's and women's departments. For example, in visiting the women's department in the mid-forenoon, the inspector learned that the graduate head nurse was off duty on holiday time from 7 a.m. until noon and that there were four nurses on duty. This being a holiday, the supervisor of the department also was on holiday time, and she was relieved by a graduate nurse from without the department.

How One Hospital Nurses Ward Patients

There were twenty-one patients in this ward at the time of the inspector's visit. Eleven were confined to bed, and three of the semiprivate patients were also bedfast. These patients were able to help themselves and to vacate their beds daily so that they could be made. Bedpan hour having

arrived, the nurses were busy in waiting on the patients. A patient who had been removed to the operating room for a transfusion of blood was returned at this time, and the senior nurse in charge assumed the responsibility of placing her in bed. Another pupil was cleaning linen cupboards, another giving out and collecting bedpans and still another was busy in the diet kitchen preparing trays for the then expected arrival of the food trucks. In the midst of this work, a call was received from the x-ray department for a nurse to bring a patient back to the ward. The period from 7 a.m. to 9 a.m. is given up in this ward to serving breakfast, giving out medicines, bathing patients and the general preparation of the ward for the physicians' rounds, which start at 9 a.m.

The Nurses' Special Duties

The work between 9 a.m. and 11 a.m. consists largely in accompanying physicians in round making, taking laboratory specimens, assignments at classes and in general, preparation for the serving of the noon meal at eleven o'clock. Few realize the amount of time required in the transportation of patients to operating rooms, x-ray departments and special laboratories such as physiotherapy and basal metabolism. Added nursing of critically ill patients must always be given and in the aggregate the "specializing" of this type of patient, as well as the postoperative patients in the surgical ward, is time consuming. In addition, much of the graduate nurses' time is required for educational activities necessary for the proper supervision of pupil nurses during the performance of routine ward work.

An inspection of the activities of the men's medical ward revealed situations similar to those described. In this ward, there were found to be on duty one graduate nurse in charge and four pupil nurses. At this time, the graduate nurse was assisting a house officer in administering an intravenous injection of fluid to a very ill patient. A pupil nurse was also rendering aid. Within a few minutes diets arrived, and the graduate nurse directed her attention to the supervision of their serving, the pupil nurse remaining with the physician. Two pupil nurses and the graduate continued in the business of serving the noon meal, another pupil nurse being engaged in setting up the special diet trays in the ward kitchen. These nurses were caring for fifteen bed patients, one of whom was considered critically ill.

It is a common practice for physicians to order medicines to be administered just before meals are served. It is the usual custom between 10:30 and 11 a.m. for medicines to be given, bedpans to

be distributed, and for the work of the department to be hastened in order that meals may not be delayed. The work in this ward prior to 10:30 a.m. had consisted in the performance of routine housekeeping duties, cleansing baths, assisting the house officer in collecting nine blood specimens and the sending of two patients to the x-ray department. In the midst of serving meals, a patient was returned from the x-ray department and a new one admitted. Further to increase the

eleven to one it is difficult for the intern to perform any routine ward work such as the taking of histories, the examination of patients, the administration of infusions and the performance of other minor medical surgery. From 1 to 4 p.m., the resident physician has access to the patients, except on two or three days a week when visitors are in the wards, when it is almost impossible for the resident to accomplish much work. The resident's evening meal being served

RATIO OF PERSONNEL TO PATIENTS

	Type of Hospital	Bed Capacity of Patients	Daily Average of Patients	Number of Personnel	Ratio Total Personnel to Bed Capacity	Ratio Total Personnel to Daily Average Patients	Ratio of Bedside Personnel to Patients, Including Nurse Helpers and Orderlies	Ratio Nursing Personnel Without Nurse Helpers to Daily Average Patients
Hospital A	General	2,000	1,800	740	1:2.7	1:2.4	1:3	1:4
Hospital B	General	560	390	263	1:2.9	1:1.4	1:2	1:2
Hospital C	General	402	269	191	1:2.1	1:1.4	1:2.3	1:2
Hospital D	General	360	250	161	1:2.2	1:1.5	1:2.3	1:2.4
Hospital E	General	340	193	143	1:2.3	1:1.3	1:2.5	1:3
Hospital F	General	331	204	181	1:2.8	1:1.1	1:2	1:1.5
Hospital G	General	351-323	280	159	1:2	1:1	1:2	1:2.5
Hospital H	General	316	204	136	1:2.3	1:1.5	1:2.5	1:2
Hospital I	General	300	195	167	1:2.8	1:1	1:2	1:1.4
Hospital J	General	232	150	109	1:2.1	1:1.3	1:2	1:1.5
Hospital K	General	143	132	84	1:1.7	1:1.5	1:2	1:2
Hospital L	General	112	75	45	1:2.4	1:2	1:3	1:2
Hospital M	General	1,252	1,142	573	1:2.1	1:2	1:2	1:2.5
Hospital N	General	500	412	272	1:1.8	1:1.5	1:2	1:2

¹Basinets

requirements upon the nursing service of this ward, a patient unexpectedly developed convulsions and was removed to an isolation room, at which time the attention of a pupil nurse and the resident physician was urgently necessary.

It will be seen then that during the short observation period of one hour, all of the nurses on duty were actively engaged in caring for patients in some way. That those on duty represented but one-half of those assigned to the department does not add to or subtract from the problem confronting the supervisor. When those off duty returned others would leave, thus complicating rather than simplifying the problem of performing the day's work.

Complications That May Arise

Comment should be made here on some of the problems that confront the medical staff of a hospital in carrying out its daily work. It is impossible for wards to be ready for the physician much before 9 a.m. The noon meal is usually served from eleven to twelve o'clock. The interns' noon meal is served from twelve to one, so that from

from 5 to 6 p.m. and the usual order for the extinguishing of lights in wards at 9 p.m. leave as will be seen a maximum of six or seven hours for ward work, provided the intern stays on duty every night. This is impossible. When one considers the manifold duties of the intern, the many hours during which routine work is impossible, and the fact that round making with chiefs is also exceedingly time consuming, it is not difficult to explain delay in carrying out ward work, even in the case of the best and most active interns. Many hospitals have rules that prevent round making during the serving of meals. Interns are frequently required to be on duty during visiting hours, but the difficulties connected with the performance of routine work during the latter period, for example, are too obvious to require description here. Whenever teaching is being carried on in ward areas, the performance of routine work is further complicated.

This is the first of two articles covering a survey of the details of rendering nursing service to the hospital's patient. A second article will appear in the next issue.



FRANK ELMO CHAPMAN (1884-1931)

WITH deep sorrow, shared with the entire hospital field, THE MODERN HOSPITAL records the death of Frank Elmo Chapman at Tucson, Ariz., on July 9, 1931, after an emergency operation for brain tumor.

Mr. Chapman was 47 years of age and more than half of his life was devoted to hospital administration, in which profession he attained national recognition as one of the ranking authorities. He had the respect of all hospital people and enjoyed the devoted friendship of those whose privilege it was to know him intimately. An idealist, he was intensely and constructively practical, with courage to adhere always to fundamental principles. Intolerant of mediocrity in service to the sick, outspoken in condemnation of hypocrisy, he was the most generous of men, and was loved by his own staff as few are loved by their co-workers.

As personal assistant to one of the leading railway presidents of the country, Mr. Chapman as a young man had the advantage of unusual training in executive work. From this position he was placed in charge of the newly organized medical department of the St. Louis and San Francisco Railway Company, where he gave efficient service from 1906 to 1911. Then he was called to one of the most difficult tasks of that day in the hospital field, the reorganization of the St. Louis City Hospital and its separation from politics. After four years of courageous and successful administration, resulting in the complete rehabilitation of this large municipal institution, Mr. Chapman was chosen in 1915 to take charge of the newly erected Mt. Sinai Hospital of Cleveland, his qualifications being interpreted to the board by Dr. S. S. Goldwater, whose recent comment is a fine analytical tribute to one who was an outstanding exponent of sound administrative procedure: "I was impressed, as everybody was, with his sincerity, his energy, his resourcefulness, and his remarkable sense of order.

He saw into the mazes of complicated situations at a glance and had remarkable intuition for dealing with such situations effectively."

Mr. Chapman soon made a profound impression, not only on the trustees and staff of Mt. Sinai, but upon the entire community of Cleveland at a time when that city in common with the country at large was beginning to think in terms of a new era of hospitalization. The institution with which he associated himself became noteworthy because of the excellence of its service and his advice and counsel were eagerly sought by the hospitals of other cities, and he gave liberally at all times from his increasing fund of specialized knowledge of administrative problems and procedures. Few men have so completely dedicated their all to the betterment of the hospital field.

Several years ago, with astounding courage, Mr. Chapman met a protracted period of illness involving some twenty surgical operations under general anesthesia and necessitating a dozen or more blood transfusions. From this baptism of fire he finally emerged with depleted reserve strength of body, but with accentuated keenness of mind and enhanced devotion of his basic creed that, "above all the hospital exists for the patient." It was a fitting tribute to his talents and his recognized ability that in August, 1930, he was appointed director of administration in charge of the University Hospitals of Cleveland, one of the most important medical centers of the country. To this great responsibility Mr. Chapman brought a ripened philosophy of administration, a depth of understanding of interlocking organization problems, and a rare sagacity in solving them.

Hospital literature was enriched, state and national hospital associations were strengthened and the profession of hospital administration was dignified because of the contributions, the service and the character of this man.

Editorials



Vienna

THE Second International Hospital Congress, which attracted 600 participants from all the civilized nations of the globe, closed on June 14 with several notable achievements to its credit. Of these, the organization of the International Hospital Association is perhaps the most significant from the so-called "international" point of view, which was so auspiciously defined at the first congress in Atlantic City two years ago.

The association bids fair to overcome barriers imposed on men by political ambition as well as by space and time, and to create natural cooperative relationships between practitioners of administrative medicine, for they have shown at these biennial gatherings that they have much to give and to take from each other professionally. Henceforth there is to be a common meeting ground for those who practice the art and science of hospital administration everywhere. A trilingual publication, *Nosokomeion*, will serve to strengthen these newly developed relationships. The emphasis placed on the humane aspects of hospital administration at this congress, however, is one of the most warmly colorful features of the picture and bears a definite relationship to its background, Vienna.

"We have built a beautiful city not because we are rich but because we are poor," said Dr. Julius Tandler at the dinner given by Sir Harold Pink and the delegates of the British Hospitals Association to the American group before the close of the congress, "and also because we know that beauty influences health and makes life worth while." The spell of Vienna was not entirely caused, however, by its beautiful buildings and boulevards, or by its friendly greeting of the stranger, or by its advanced and thoughtful program of social welfare. At this congress of administrators, which medical men patronized in such large numbers, the spirits of the older masters of the clinic seemed to be abroad. Medical giants of a former generation, Skoda, Billroth, Nothnagel and a host of other men of science to whom a grateful medical world pays homage, did their best work here and now rest in the Friedhof of Vienna, a few steps from that hallowed spot where lie the men of art, that musical tribe of whom Mozart, Schu-

bert, Beethoven, Brahms and Johann Strauss are such noble examples.

At the American Medical Association in Vienna to-day one still finds a constant stream of ambitious students who come from across the seas to learn good scientific manners and ways of thinking from the present masters of its numerous and varied clinics. The specialty of administrative medicine, too, has much to learn from the clinics of talented men like these whose gifts to the world are more substantial and indeed transcend the size and architectural characteristics of the buildings in which they produce their best work. On the memorial to Nothnagel in the cloisters of the magnificent University of Vienna are inscribed the words, "*Nur ein guter Mensch kann ein guter Arzt sein*," a human sentiment which found an echo in the corridors and assembly halls of the congress, for it was everywhere apparent that the new association wished to dedicate its deliberations to the physician who is first of all a humanitarian.

August Days in the Hospital

THE arrival of Independence Day signalizes the beginning of the exodus of vacationists from heated city surroundings. August residential streets are strangely quiet and deserted at midday, and crowds collect before the window displays of steamboat and railway agencies. Thus must many enjoy vicariously the cool vistas and the intriguing recreations of vacation land.

Numbered among those who are turning their faces from home are many physicians. Some of the most distinguished men of medicine will not be seen in the wards and corridors of their respective hospitals for many weeks. Often only the young and less prosperous physicians will be found available to perform the scientific work of the hospital during the summer months. The whole atmosphere of the institution seems to partake of the ennui of heated days and restless nights. The sick toss fitfully on their beds and death seems always to lurk nearer and nearer to those who have suffered long with chronic disease.

The alert executive can do much to increase the comfort of hot weather patients. Fans and more fans for patients and workers, cooling drinks in the operating rooms, hot weather menus emanating from the dietetic department, and ice cream for children, are all simple but effective measures for combating heat discomfort. The hospital may even utilize its shady lawns during midsummer to entertain its friends among the poorer children and to provide a breathing space for convalescent patients. Moreover, the instruction of interns

must not come to a standstill because major staff members choose to go a-vacationing. Ward patients must receive only the highest type of medical care.

Seasons come and seasons go, but the hospital must never cease endeavoring to adapt its resources to meet satisfactorily the physical and even the spiritual needs of the community.

What Price Autonomy?

RECENTLY a well known public health and hospital expert voiced the opinion that the time is fast approaching when a centrally located base hospital, with one or more substations, will perform the work now attempted by a number of feeble, ill equipped and inefficiently managed institutions.

To this advanced doctrine there will be many dissenters. Autonomy to many is a precious quality to be preserved at all costs. But such hospitals have not seen the vision of community responsibility for protecting the health and the lives of all those whom they should serve. To preserve an institutional existence at the cost of providing inadequate service to the sick is an act of misdirected zeal. To merge with a stronger organization or even to discontinue a hospital effort altogether is sometimes a fairer and braver move.

The patient is too frequently required to pay dearly for the preservation of the autonomy of a small impoverished hospital. He should be the last to be permitted to make this sacrifice.

A Form of State Medicine

AT A recent meeting of the American Medical Association, the fairness to the practicing physician of the gratuitous treatment, by the government, of veterans for ailments not incurred in line of duty was seriously questioned. Particularly was the justice of such a policy doubted in cases where the recipient of such a service was fully able to pay for effective medical treatment.

None will dispute the fact that those who served their country in the hour of need deserve help. But many are just as certainly convinced that Federal physicians and hospitals are in no way obligated to remove tonsils and appendixes and to treat pneumonia and typhoid fever—conditions which, arising a decade and a half after the individual's discharge from service, can in no way be related to such service. It is to be regretted that any war veteran should ever come to a state of physical

need, but when this is the case, free and efficient medical care should be provided by some governmental agency. But when no economic stress exists and when the medical condition bears no relation to war service, for free treatment to be accorded at governmental expense appears strongly as unwarranted and unjustified competition. Moreover, the hospital is a party at interest in this matter.

The hospitals of the Veterans' Bureau should in no way compete with the privately endowed institution. When such patients as have been described are admitted by the former, the income of the latter is unfairly limited. Paternalism of this sort is to be discouraged, and both physicians and hospitals should join to raise their voices in condemning such apparently unnecessary encroachment on their prerogatives.

Don't Be Stampeded by the Depression

IT CONCERNS all of us! The annual trek of hospital executives to the scene of meeting of the American Hospital Association is but two brief months away. Toronto is the rendezvous. The date September 28 to October 2. Your colleagues, friends and classmates scattered throughout the continent will be looking for you; the national association through its officers and various committees cannot emphasize too much the need for and the value of your presence.

Without detracting from previous conventions, it is not an exaggeration to state that the coming meeting will offer the most complete program of practical talks and demonstrations, scientific discourses pertinent to the hospital business and inspirational addresses that has yet been presented. In a word, it will cover a broader range of subjects than has ever before been arranged for a similar meeting.

It is often said that we get nothing more out of anything than we put into it and this holds true in the matter of gatherings for business discussions to a greater extent than in almost any other instance. The individual who attends the conventions of his business associates with the firm purpose of getting the most good from them, who attends all the business sessions, who takes part in the discussions, giving his experiences and comparing them with those of others, will find that he has learned much that will help in making a greater success of his business during the coming year.

Hospital men are gradually coming to an appreciation of the possibilities that lie in an an-

nual exchange of ideas. The profession has not yet reached the level of other industries where conventions have become of great value and are recognized as strong factors in the advancement of business but the realization is growing that those who attend such meetings draw interest on their investment while the stay-at-homes suffer a depreciation of their principal.

An association is no better than its units and can flourish only through the loyal and generous support of its membership. A practical and a pleasant way for each of us to help is to be on hand when the bell rings for the opening of the annual conclave.

Take Off the Bell

THERE is much that is stirring to the imagination in the spectacle of a hospital ambulance recklessly clanging its way through a bustling and crowded city street. The cars of civilians draw to the curb, traffic at street intersections halts and the jostlings of busy men and of carefree sightseers cease for a moment.

In the rarest of instances, however, the few moments thus gained by the reckless speed of an ambulance mean the saving of a life. A more sedate approach to the hospital is often of greater benefit to the patient than a wild careening over car tracks and cobblestones. When life will be lost because a few more minutes are spent in transit, the hospital unfortunately does not usually possess any magic of personnel or equipment that enables it to save the patient. The ambulance should obey traffic rules. If the traditionally prominent and shining bell on its radiator leads to excessive speed and to the endangering of the life of the patient and of the pedestrian, let it be removed and some less dramatic yet sufficiently effective warning signal be relied upon to clear the way.

A Call to Arms

TO MANY persons cancer represents a loathsome thing, a scourge unknown in cause and little more understood as to cure. To them it carries a suggestion of disgrace, of shame when the presence of the disease is proved. Many believe that where there is no pain, there is no cancer; that so destructive a state must surely early announce itself by causing discomfort, by quickly handicapping the physical activities of the unfortunate possessor. If such were the case, the lives of thousands would doubtless be saved. But, alas! Cancer creeps upon the unsuspecting without even a definitely classical symptomatology manifesting

itself. "Fight Cancer With Knowledge," the battle cry of the American Society for the Control of Cancer, may well be adopted by every hospital that has worked as it should for the prosecution of good preventive medical work.

The New York Cancer Committee has recently issued a commendable booklet that portrays the part the nurse may play in the fight for the control of this disease. Nursing the cancer patient calls for the exemplification of many of the finer traits of character that the graduate nurse should possess. Cheerfulness, skill in staunching unexpected hemorrhage, judgment in withholding narcotics and withal a tact which, without seeming apparent, avoids unpleasant references to prognosis or pathogenicity, these and many more are the intellectual and professional requirements of the nurse who cares for the cancer patient.

Knowledge, however, is a difficult weapon to forge. Each hospital should do its part toward developing effective study groups to disseminate the information needed by a lay public to dispel the often unjustified gloom that so frequently enshrouds this condition. "Fight Cancer With Knowledge" should be the slogan of the school for nurses just as it should be that of the undergraduate and the postgraduate institution for doctors.

A Petty Financial Policy

GRAFT has been defined as money or other gratuities, the source of which the recipient is ashamed or afraid to reveal. Since the beginning of time influence and favor have been purchased by the passing of valuables in some form.

Firms retailing orthopedic apparatus and supplies have in some cities originated the practice of crediting the referring physician with a definite percentage of the money his patient pays for braces, belts or artificial limbs. This is a petty unethical and dishonest practice on the part of both the physician and the supply house. Hospitals, at times, receive checks that are often cleverly masked as a gratuity or at times more brazenly calculated on an actual percentage basis to represent some fractional part of the funds realized by the sale of glasses or orthopedic equipment to dispensary patients. Such a practice results in a greater charge to the patient and it is, for this reason alone, a low form of moral dishonesty.

To encourage sharp dealing firms in such unfair business methods is harmful enough, but to play false with patients is a gross betrayal of trust, wholly unworthy of both the fine traditions of the institutions of yesterday and of any high grade ethical hospital of to-day.

Is Your Problem Answered Here?

WHAT PERCENTAGE OF EACH HOSPITAL DOLLAR SHOULD BE SPENT FOR ESSENTIALS?

A hospital superintendent in Ohio has forwarded this query with the explanation that her institution is one with less than fifty beds and that she has recently had considerable difficulty in justifying the expense necessary for its maintenance.

In the last analysis an endeavor to learn what part of each dollar is spent for each of several necessary items is a fair comparison only when hospitals of approximately the same size are considered. It is certainly reasonable to suppose that a hospital of 500 beds will be able to purchase supplies at a lower price than would be possible in a smaller institution.

Among other factors that affect the expense of conducting a hospital are the distance from wholesale markets, whether the country in which it is located is industrial or agricultural, and the economic grade of its clientele. In a small institution with limited purchasing power, in which funds are not available to buy in greater quantities than are needed for immediate consumption, the expense will be greater than in one in which credits are better so that sufficient money is always at hand to take advantage of purchasing opportunities when they arise. In this connection, it will be interesting to note that in a group of hospitals in the East, it was recently found that the following proportions of each dollar were expended for the essentials:

Administration	0.082
Professional care of patients.....	0.171
Medical and surgical supplies.....	0.078
X-ray	0.017
Laboratory	0.029
Dietary	0.287
Housekeeping	0.083
Laundry	0.043
Plant operation and maintenance.....	0.166
Social service	0.007
Out-patient department.....	0.017
All other expenditures.....	0.019

In other words, it will be seen that daily about eight-two cents out of each dollar is necessary to meet the major items of expense, while the remainder is apportioned to various important but

less expensive activities. It will be observed that of this group a relatively large outlay has been required to maintain the dietary department. The next item in order of cost is the professional care of patients which includes nurses' salaries and all other similar personnel expenditures. There is also included in a number of these items the expense necessary to meet the salaries of personnel. It may be said that no institution should spend more than fifty cents of each dollar for salaries and that twenty-five to thirty cents a meal per patient should be sufficient for the purchase of raw foods. The type of work that is being performed in laboratories, whether routine or research in character, will largely determine the relative expense of conducting this activity.

In hospitals of less than fifty beds, from 10 to 15 per cent could be safely added to these figures because of the necessity of purchasing in small quantities and because the maintenance and overhead expense will be relatively higher in the case of each patient. Finally, in satisfying boards of trustees as to the necessity for expenditures, certainly the most convincing method is to dissect each dollar expended so as to show the amount required for each item.

HOW CAN A DEPARTMENT FOR THE PREVENTION OF DISEASE BE ORGANIZED?

It is becoming increasingly more frequent for the out-patient department of the hospital to consist not only of curative but of preventive medical activities as well. It does not seem to be always wise to mingle these types of work too closely. To be sure, no curative clinic can be conducted without dispensing information to the public as to how to prevent a recurrence of the patient's disability. On the other hand, there is a curious tendency on the part of the out-patient personnel to subordinate preventive principles to curative effort. In every hospital that conducts an out-patient department there are a number of purely preventive clinics, such as the work among well children, particularly postnatal cases. There are also found almost as a routine clinics caring for cardiac and tuberculous patients and those giving periodic health examinations. Whenever clinic administrators are required to adjust their mental processes

to the successful performance of both types of work at the same time, the preventive angle usually suffers. If the clinic personnel is not sufficiently large to care for the sharp differentiation between preventive and curative work, it seems wise to set aside one or more days during which preventive clinics only are held. There is no finer opportunity for the hospital to impress its community with the necessity of keeping well than to originate and conduct such a department. As soon as a hospital has the nucleus for a preventive department, it requires little initiative and organizing ability to separate these general types of clinic work and to organize a separate department for each activity.

WHAT PERCENTAGE OF ITS EXPENDITURES SHOULD EACH HOSPITAL EARN?

It seems in this day and age of retrenchment that more and more hospitals are being required closely to survey their incomes and expenditures with the aim of increasing the former and of diminishing the latter. It is almost axiomatic that no general hospital which pretends to do its quota of free work can show a balance at the end of the year. Indeed, in many institutions 50 per cent of this work is totally free. Of course, no hospital depends wholly upon its income from patients. The total income is largely determined by the economic type of its clientele, the number of private rooms available and the income from endowments, gifts, community chest appropriations and miscellaneous sources.

In a certain group of hospitals in an Eastern metropolis, it was found that about 74 per cent of the expenditures was covered by earnings. In a certain other group of institutions, the actual earnings varied from 16 to 89 per cent of the expenditures with an average of 73 per cent. This income, of course, included a substantial contribution from a community chest and varied largely as to the type of the individual hospital. Five institutions in this group earned 75 per cent of their expenditures. Of course, the relationship of income to expenditure is largely affected by the number of free days of service given. In this group, free days varied from 2.5 to 56 per cent of the total days of service, with an average of 24 per cent. It may be said that in the average American community with the usual competition and the customary financial condition of the public generally a hospital should earn from 60 to 75 per cent of its expenditures. On the other hand, when a community hospital is expected to fill the dual place of a private institution and a

municipal, county or state charitable hospital, the amount of income realized may drop sharply. Whenever this is the case, it is the duty of the board of trustees to insist that it receives compensation from duly organized tax collecting bodies for the care of indigent patients.

IS AN ANNUAL BABY SHOW A BENEFIT TO THE AVERAGE HOSPITAL?

No appeal from the hospital to the public is stronger than that which radiates from the maternity department. There appears to be nothing undignified or objectionable on the part of the hospital in taking advantage of nurturing this interest. In some institutions, the fluctuation in the maternity census is directly reflected in the annual balance sheet. In other words, a complete and scientific service must be available even though the census rises and falls in this department. The hospital has a right to utilize every possible means of creating confidence in the minds of people generally that it is capable and willing to serve. The annual baby show represents the finest type of publicity. When a large number of infants are gathered together, there is always, of course, a danger of cross infection. But on the whole, a baby show, if properly handled and deliberately approached, offers splendid possibilities for the hospital.

As a corollary to such an effort, there has frequently resulted not only a firm devotion to the hospital on the part of mothers and fathers, but also an attachment that has determined the loyalty of the future generation to the institution. From the postnatal clinic to the children's clinic, to the adult clinic or, in the more opulent class, to the use of the private room service is but a logical sequence. It is by the adoption of such modern methods that the clientele of the hospital is developed.

SHOULD CHARTS BE LENT TO STAFF PHYSICIANS FOR REMOVAL FROM THE HOSPITAL?

The institution is placed in a difficult position when it encourages the scientific literary output of the hospital and at the same time is loath to lend charts to staff physicians in order that such papers may be prepared. Yet there seems to be no solution to the question as to what is to be done when a liberal practice is adopted in regard to lending charts and as a result records are continually lost. Some hospital administrators believe that the only solution to the problem is the adop-

tion of a policy that represents the lesser of two evils—the lending of charts as a routine after a receipt has been given with the hope that few will be lost or mislaid.

In some hospitals, there has been set aside a room, adjacent to the record library, equipped with desk space, where staff physicians and their assistants may study case records deliberately and without being disturbed. It is the duty of the institution to safeguard the records of the patient for many reasons, most of which are too obvious to mention. Perhaps the latter policy is the wiser one and yet in the absence of such facilities some arrangements should be made whereby staff physicians may have the advantage of the information that has been secured from patients studied on their service. Perhaps some midway course can be discovered whereby the interests of the hospital and the patient can be safeguarded without offending the staff physicians by refusing to lend the charts.

SHOULD THE HOSPITAL CONDUCT A COURSE FOR ANESTHETISTS?

The administration of anesthetics as a profession is attracting to it many nurses who appear to prefer this work to other types of nursing endeavor. Every hospital has received inquiries as to the possibility of securing training in the administration of anesthetics. But comparatively few institutions have inaugurated well organized schools for instruction in this work. In every large city, however, there are one or more successfully conducted courses that are usually popular. In the first place, every hospital should have a well organized department of anesthesia with a physician at its head. The number of resident nurse anesthetists will depend upon the size of the hospital and its surgical department.

With abundant material at hand it usually is easy to organize a school for anesthetists which may consist of few or many students in training. The advantages gained by the adoption of such a policy are many. Bringing an educational atmosphere into any hospital department does much to improve its morale. The teaching of anesthetists requires that physician lecturers and nurse anesthetists be on the alert to give the best instruction possible. The hospital receives a certain amount of income from such a course which offsets in a large measure the difficulties and extra work required. In most institutions with such a school, a course of approximately four months' duration is offered and a fee ranging from \$100 to \$150 is charged. The presence after a time of

an added number of available anesthetists is a convenience to the hospital. The elevation of the standing of the anesthesia department, as far as the rest of the hospital is concerned, is a valuable by-product of this work. In any community hospital, the addition of a school for anesthetists is a step that is commendable.

HOW CAN LOCAL UNDERTAKERS' OBJECTIONS TO AUTOPSIES BE OVERCOME?

As has been frequently stated in this magazine, one of the chief deterring influences to securing a high percentage of postmortem examinations is the local undertaker. It has been the experience of many hospitals to secure a permission for the performance of an autopsy only to have it recalled after a visit by relatives to the establishment of the embalmer. It is true that after a postmortem examination the preparation of a body is not quite as easily performed as in cases in which there is no incision of tissues. And the hospital is not always blameless in the controversies in regard to autopsies that arise between it and the undertaker. Bodies are frequently improperly prepared for delivery to the embalmer if postmortem examinations have been made and even in instances in which no examination has been made. The superintendent's supervision over the postmortem room is often ineffective, the superintendent frequently considering it a place requiring little of his time and attention.

In one Eastern city, it has become a tradition for the embalmers' association at least once annually to invite leading pathologists to speak to them. Frequently a subject is provided for the demonstration of the embalmer's practice. An agreement has been reached between the local hospital association and the embalmers' association both as to incisions to be made and as to the technique to be adopted in the preparation of the body following autopsy. It is a worth while practice for the hospital to offer the undertaker the use of a table, material and instruments with which to prepare bodies for shipment in case of the institutional death of a patient from without the city. Such accommodating practices cost little in money and effort and are definitely reflected in an elevation of postmortem percentages. It is high time for the hospital to descend from its pedestal and to cease demanding in the name of justice that autopsies be held. It would be more practically successful to adopt certain salesman-like yet ethical and dignified methods by which to increase the number of postmortem examinations.

NURSING AND THE HOSPITAL

Conducted by M. HELENA McMILLAN, R.N.
Director, School of Nursing, Presbyterian Hospital, Chicago

Winning Cooperation for the Public Health Movement

By CARL E. BUCK, DR.P.H.

Deputy Commissioner and Executive Officer, Department of Health, Detroit

UNTIL comparatively recently public health programs were conducted in such a way as almost to preclude the necessity for individual responsibility except insofar as the individual was required to abide by certain laws and regulations.

Previous to about 1910, public health work concerned itself primarily with the control of man's environment. Remarkable progress in preventing devastating outbreaks of disease was made through attention to environmental factors. With improved sanitary conditions, plague practically disappeared. In cities, the typhoid fever rate began to decrease as soon as safe water supplies were provided and the pasteurization of milk instituted. Cholera was similarly eliminated. The Panama Canal Zone, a veritable hotbed for malaria, was made into one of the healthiest spots in the world through preventing the breeding of the *Anopheles* mosquito and by enforcing rigid sanitary requirements. The enforcement of vaccination eliminated smallpox as a scourge. With the exception of smallpox treatment nearly all these improvements which so greatly reduced the hazards of life were effected by controlling man's environment. They were accomplished without any great cooperation or effort on the part of the individual.

In view of the almost miraculous reduction in certain diseases effected through improved sanitation, is it any wonder that we believed that disease not only had its origin in but was also spread through environmental factors, and for the most part overlooked the individual?

It is only within recent years that we have come to the full realization of the fact that communicable

diseases, with few exceptions, have their origin in man and are spread by man. The individual is just beginning to get the attention he deserves in public health work. In the early days of public health work the problem of controlling and preventing communicable disease was of such paramount importance that our entire efforts were concentrated upon it. After truly remarkable progress we paused for a breathing spell and began to realize that health in its broader sense means something more than the mere absence of disease.

Health Promotion Is Needed

We have come to appreciate the fact that formerly there were many individuals who while they were not suffering from any definite disease nevertheless did not possess the vigor and strength commonly referred to as bodily resistance which would help them overcome the physical hazards to which they were apt to be subjected. With this realization, health promotion, as exemplified by regular habits of living, sleep, rest, exercise and mental hygiene, avoidance of excesses of all kinds and proper attention to nutrition, became an important part of the modern public health program.

While it is true that there are still some parts of the world in which environmental factors have not been adequately brought under control, for the most part further improvement in health conditions, particularly in this country, will depend largely upon the extent to which we are able to persuade large numbers of individuals to accept and practice procedures of preventive medicine and health promotion.

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into two great groups of activities: The first group is that over which the individual has little or no control, such as water supply, milk supply, the protection of foods and food products other than milk, sewage disposal, to some extent housing conditions and to a limited extent communicable disease. These things we as individuals can do little about except to exert our influence as voters to see that adequate legislation is passed to ensure safety. The health department or some other properly constituted public agency must always have charge of these functions and must see that proper laws relating to them are passed and that they are so enforced as to assure the protection they are intended to provide. The second group is that over which the individual has control, including adequate prenatal, confinement and postnatal care, regular medical attention for well babies, prophylactic dental care, complete physical examinations for both young and old, personal hygiene, using the term in a broad sense to include rest, exercise, sleep and diet in addition to personal cleanliness, immunization against preventable communicable diseases and even in a large measure the prevention of the spread of infection.

As individual citizens we may decide for ourselves and our families whether to accept or to reject these procedures. Health workers throughout the country, with the exception of a few localities in which environmental factors are still of major importance, are more interested in this second great group of activities than in the first, for the evident reason that we have been exerting our efforts for a long time toward securing a safe supply of water, milk and food, with the result that these and other environmental factors have been well provided for, while in such phases of work as prenatal care and complete physical examinations, the surface has been only scratched.

The Meaning of Health

The major health problem before us to-day, then, lies in getting the individual to accept and practice those scientific procedures of preventive medicine and health promotion which we know will be of benefit to him. We recognize the fact that health in its proper sense means something more than absence of disease. To be truly healthy we should have that strength and feeling of well-being—often spoken of as bodily resistance—which will help us to overcome the physical hazards of life. This means that we are giving increasing attention to habits of living—sleep, rest, exercise and nutrition and the avoidance of excesses of all kinds.

The success of our efforts will be measured not by what we are able to induce a small number of

individuals to do for themselves but rather by the degree to which we are successful in educating the majority of the citizens of the community not only to accept but also to practice health procedures.

Since we cannot pass laws to force individuals to have periodic physical examinations and to acquire proper habits of diet, for example, our job becomes one of health education. To be successful a health education program must create a general demand on the part of the group it is desired to reach and, equally important, it must see that the supply to meet the demand is adequately provided. To be more explicit, we must not only get the majority of people to want periodic complete physical examinations, but we must also see that physicians are available who are willing to give and are capable of giving the desired type of examination.

Upon Whom Does the Responsibility Rest?

While health workers universally recognize the fact that future improvement in health will depend largely upon the success of health education, there is no phase of work in the entire field of public health administration in which we are so woefully weak as in health education. There is one exception to this weakness and that is the public health nurse. The public health nurse, and all nurses should be public health nurses whether they are officially designated as such or not, does effective health education work although even in this group there is wide variation between individuals.

The method of approaching the stupendous job of health education varies in different communities. Some communities take the attitude that the entire job is one of public responsibility, that the community should not only educate its citizens to want for themselves and for their families complete physical examinations, adequate prenatal care, regular medical attention for well babies, prophylactic dental attention and the other various practices of preventive medicine and health promotion, but that it should also provide the funds and personnel necessary for supplying the demand thus created. In other words, such a community assumes that the entire field of preventive medicine and health promotion is a public responsibility to be carried on solely by the community at public expense. Other communities have the feeling that their responsibility lies in educating their people to the need of such services, these services to be provided by those in the community capable of supplying them—the private physicians, dentists, nutritionists, psychiatrists and others.

While either of these attitudes toward the problem may be correct under certain circumstances, in the average community neither is probably wholly right or entirely wrong. A combination of the two

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is most likely to produce the best results. If we constantly bear in mind that the goal towards which we are aiming is universal participation in the procedures of preventive medicine and health promotion, it will help greatly in determining our course of action. It is, we believe, unreasonable to expect any large and reasonably well-to-do community to supply at public expense the personnel and funds necessary to provide all the services that universal participation in health procedures would demand. If this hypothesis is correct, from whom can these services be procured except from the private physician, the dentist, the nutritionist and the psychiatrist? In such a community, and the majority of communities come within this category, we must always bear in mind the necessity of active participation on the part of the private medical and dental practitioners, if our goal is to be reached, and we must organize our health educational program accordingly.

Educating the Individual

So much for the general method of approaching the problem. Specifically, just how is the health education program to be carried on so that it will persuade or educate you and me as individual citizens to adopt for ourselves and our families the practices that will result collectively in improved health of the community? The mechanical means of developing the program are fairly clear. You and I may be reached directly or indirectly by demonstration clinics, home educational nursing visits, stories in newspapers, magazines or printed pamphlets, letters, perhaps paid advertisements, lectures and through the radio. If these recognized methods of approach are carried on continuously for a long enough period we are bound to hear of the projects that health workers are endeavoring to put into effect.

But that is not enough. This is just where the whole difficulty of the health education program arises. If you and I happen to be patients or our children are patients of the demonstration clinics we shall in all probability by virtue of the services given at the clinic and the home educational nursing visits that follow, be convinced that the procedures advocated are worth while and we shall therefore adopt them. For this reason, demonstration clinics and home educational nursing visits are the most effective means of health education. Their effectiveness in the community as a whole, however, is limited by the comparatively small number of persons whom it is possible to reach in this manner. The demonstration clinic is limited in attendance, is usually for indigents, and its true effectiveness lies not so much in what it does for the comparatively few who attend but rather upon

the degree to which we are able to make use of the results accomplished with this somewhat below par group in bringing about in the community as a whole a more general acceptance and practice of the procedures involved. Home educational nursing visits are highly successful, but the results are limited owing to the good or bad quality of the personnel.

If you and I were not reached through the clinic or by home nursing visits we still might learn of the health practices advocated, but whether or not such learning would result in our actually doing anything would depend upon a number of factors. The old saying that "you can lead a horse to water but you cannot make him drink" is particularly applicable to health education. It is comparatively easy to get us to accept health principles but it is quite another matter to get us to practice them. To get people actually to do anything our story must be told frequently; it must apply to the individual who reads or hears it and not just to people in general; it must be simply but interestingly and forcefully presented and not too long, and it must be logical and truthful.

With the exception of home visits by the public health nurse, few of our stories or talks designed to improve health conditions meet the requirements we have just mentioned. Most of our stories are not told in an interesting manner. They are apt to be too long and frequently they attempt, almost invariably unsuccessfully, to give too many points. In general it may be said that we fail to see in our work those things that have news value, and we are unable to popularize our stories. Perhaps our greatest difficulty lies in our unwillingness to sacrifice anything in the way of scientific detail for the sake of making our stories popular and understandable. We fail to realize that the best we can hope for in a story or talk is to "get over" one or two worth while ideas, and that to attempt to include too many points or to go into too much scientific detail only confuses the reader or listener and destroys effectiveness.

How a Central Nursing Council Can Help

The one encouraging feature of general health educational work is that we are beginning to take cognizance of our weaknesses and make provision for their correction. Even in the field of public health nursing, which is at present the one generally effective piece of health education work that is being done, there is wide variation in effectiveness between organizations and between individuals. This is due partly to a variety of administrative policies and partly to differences in educational background. In general the effectiveness of health education in public health nursing will vary in

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direct proportion to the educational background that those engaged in it possess. It also follows that the effectiveness of the entire program will depend in a large measure upon the degree to which public health nursing in a community is organized and standardized. This means, in effect, that a central bureau or council of nursing should be established. A central council that will assure a standardized method of approach will avoid duplication and win public confidence. Difficulties due to a diversity of administrative policies may be avoided by having such a clearing house.

It is our duty as public health workers to provide the individual citizen with the information concerning procedures of preventive medicine and health promotion in such a way that he will wish to adopt these procedures for himself and his family. It also follows that we must see to it that the demand for medical service thus created is adequately met.

Even when we feel that our health education program is functioning effectively, there may be certain unfavorable reactions that we fail to recognize as such. For example, during the past year two eminent physicians have voiced their opinions concerning health programs in such a way as to give us food for thought. At the last meeting of the Canadian Medical Association in Winnipeg, Man., Dr. Robert Hutchinson, speaking on the subject "The Pursuit of Health," said that as a result of health programs many of us have developed a fear complex regarding our health. Parents have developed various hypochondriases through over-anxiety regarding their children. The rearing of an infant, Doctor Hutchinson claims, is now regarded as a job requiring the combined knowledge of a chemist, a psychologist and a public health officer. He claims that nervous troubles are commoner to-day in childhood than they ever were, because of the atmosphere of fuss and anxiety in which so many children are brought up. It was Doctor Hutchinson's final verdict that we need not especially concern ourselves about our health until we find something wrong with the working of the human machine and then we should see the family doctor.

A Timely Warning

Dr. William Gerry Morgan, Washington, D. C., president of the American Medical Association during 1930, at the annual meeting of the association in Detroit, said, "After looking through the list of the various agencies concerning themselves with health work, one is constrained to ask what has come over the people that makes such oversight necessary or possible. We are told that mothers have been 'educated' in the care of their children,

until they are stampeded by the multiplicity of directions and, in increasing numbers, are turning the job over to the 'clinic' or 'center' or whatever agency may be available for shifting responsibility, while they read the latest thriller or go to the movies."

While we cannot, of course, agree entirely with the statements of either of these eminent physicians, they must nevertheless give us pause. It is possible that in some instances we may have caused parents to shift responsibility and it is possible also that in certain instances we may have so emphasized each portion of the program as to make the entire picture complex and difficult. If we have caused parents to feel overanxiety or perhaps even fear of the job of bringing up their children, something is wrong with our method of approach. If these difficulties exist, and we do not doubt that they do in some instances, the cure again lies in a unified simple program such as can be carried out only when we have some central organization through which the program functions.

Malarial Mosquitoes for Hospital Use in Treating Paresis

The U. S. Public Health Service will cultivate supplies of malarial mosquitoes to be used by various hospitals in this country in the treatment of paresis, or softening of the brain, according to an oral announcement.

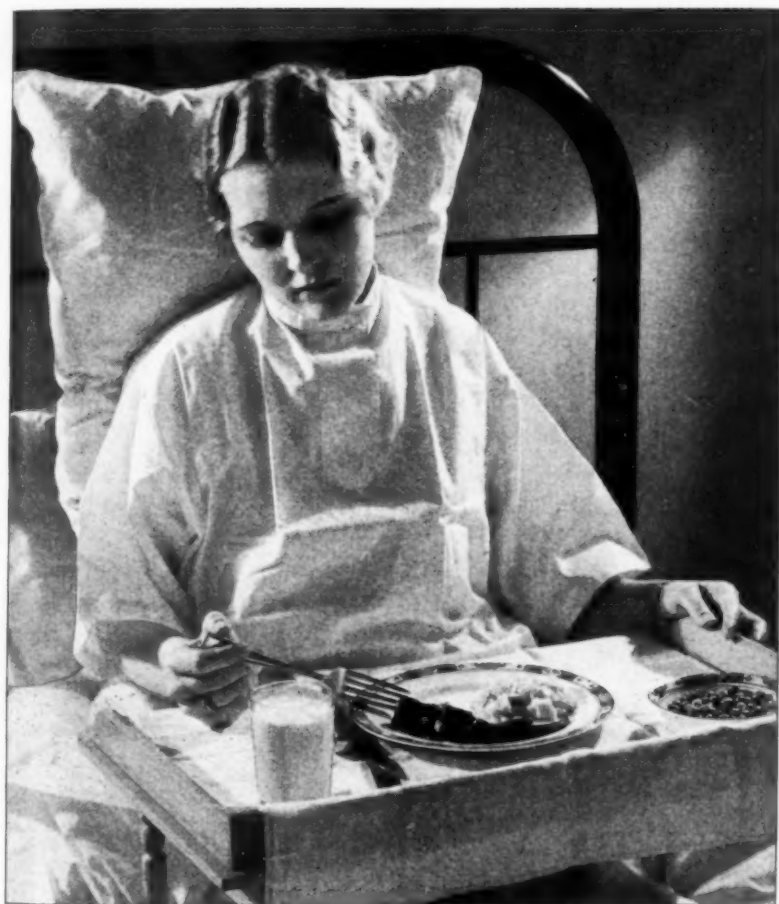
Mental patients, suffering from paresis, which also is termed "general paralysis of the insane," and which is fatal if not treated promptly and efficiently, often are cured completely when they are infected with malaria, it was explained. The mosquitoes will be bred in large numbers by the service to infect such sufferers with malaria, it was said in the report.

Numerous demands for the malarial mosquitoes already are being made by institutions where cases of softening of the brain are being treated. According to the explanation, a Public Health Service laboratory located in the Southern malarial belt of the United States will be selected as the breeding place of the insects.

The use of the mosquitoes for malarial treatment of softening of the brain must be confined to hospitals, as a precautionary measure proposed by the Public Health Service in conjunction with its mosquito service. Private cases outside of such institutions may not be treated under the rule.

A large number of state institutions have put in requests for the cultivated mosquitoes, for which the demand at present far exceeds the supply.

Hyperacidity ... a cause of THE FINICKY APPETITE ...



One of the most difficult problems in every hospital is the finicky appetite common to bed patients and convalescents.

Reporting on his studies of children suffering from loss of appetite, Dr. Charles Gilmore Kerley, New York, says:

"Gastric analysis, which we have carried out in a great many of these patients, always shows a high total hyperacidity . . . Constipation, it will be found, is usually associated with the anorexia . . ."

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Its effectiveness as an antacid has been recognized for more than 50 years. Its acid-neutralizing power is almost three times that of a saturated solution of sodium bicarbonate, and nearly fifty times that of lime water.

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NEWS OF THE MONTH



Social Workers Enjoy Profitable Week in Minneapolis

THE annual meeting of the American Association of Hospital Social Workers in Minneapolis was auspiciously opened on Monday, June 15, at a luncheon meeting at the University Hospitals. Paul Fesler, superintendent of the hospitals, and Frances Money, director of social work, received 125 guests and made them welcome in Minneapolis and at the University Hospitals.

Dr. Richard Cabot, president, National Conference of Social Work, and honorary member of the American Association of Hospital Social Workers, was guest of honor at the luncheon. He opened the meeting with a brief address emphasizing the ideals of service in hospital activity, the integration of medical and social treatment and pointed out the professional relationship of medicine and social work. He urged the careful evaluation of medical social work and stressed again the need for clarifying function and emphasizing social treatment.

Luncheon Featured by President's Address

Following the luncheon the members adjourned to Millard Hall, one of the buildings of the medical school, where the annual business meeting was held. Edith Baker, president of the association, presided and gave an excellent annual report. She called attention to the dangers of relaxing the quality of professional service in years of depression and unemployment when pressure is so great both upon hospitals for additional medical care and because of reduced incomes. She urged the medical social workers to keep clearly in mind the importance of quality of service and of quality of personnel.

Kate McMahon, educational secretary, presented her report, giving the program of the past year in the field of education in medical social work. She reported the development of an additional course in the Pennsylvania School of Social Work and Health and the appointment of Edith Kruckenburg to the faculty of that school to di-

rect the courses in medical social work. She announced that she is going to Berkeley, Calif., at the request of the University of California School of Social Work to confer on curriculum and course planning there. This will make the eleventh center in which such courses are offered.

Helen Beckley presented the annual report of the executive secretary, calling attention to the published reports of the twelve districts and the standing and special committees of the association.

Interesting progress has been made by the committee on functions in two study projects that are now under way—"The Interrelationship of Disease and Social Maladjustment" and "The Social Case Method in Institutional Management."

Handbook on Statistics Now Available

The joint committee on the publication of a handbook on statistics in the field of medical social service has announced the mimeographed preliminary edition on statistics. This is available for distribution and it is requested that it be tried this summer, corrections and additions submitted so that the printed edition can be issued early in the coming year.

The general program of the meeting was planned to offer small discussion groups on subjects of primary interest to practicing social workers.

The subjects for discussion were as follows: "The Place of the Hospital Social Worker in a Tuberculosis Program"; "Cooperative Practice in Medical Social Work and Public Health Nursing"; "The Use of the Hamilton Terminology in Medical Social Case Work"; "Methods of Statistical Recording in Medical Social Work"; "The Development of Resources to Aid in Medical Social Planning for Patients From Rural and Unorganized Communities"; "Social Information in the Medical History"; "The Social Worker and Hospital Administration."

One of the most significant meetings of the program was the joint luncheon with the National

NEWS OF THE MONTH (Cont'd)

Tuberculosis Association at which Ida Cannon, director of social service, Massachusetts General Hospital, Boston, was the speaker. The importance and significance of social treatment in tuberculosis were stressed. The historical review of development of social work and its relation to development in the care of tuberculous patients were also brought out.

Arthur Strawson, National Tuberculosis Association, presided at this meeting. Representatives of the national and Minneapolis groups were present. The program of the Wisconsin Anti-Tuberculosis Association in the development of social work in sanatoriums was mentioned.

The one large general session of the medical social workers was devoted to the discussion of the case awarded first prize in the competition of the association. As has been previously reported, there has been a competition held annually for the past four or five years. Members of the association and students in schools of social work are eligible to compete. The association has felt that by pooling practice in social recording and in interpretation of social case work through record writing, value to the entire membership would result. This year the prize was awarded to the case of "Olga Kalisch," submitted by Florence Harvey, Presbyterian Hospital, New York City.

Some Outstanding Student Records

Honorable mention was given to five cases, two of them student records. They were as follows: "Hortense Arcen," submitted by Jeanne Wertheimer, social service department, Presbyterian Hospital, New York City; "Thomas Morton," submitted by Yvonne Ford, social service department, Children's Memorial Hospital, Chicago; "Sarah Nechoma," submitted by Rosalind Herrman, Beth Israel Hospital, Boston; "Olga Felenski" (student record), submitted by Eleanor Sharpless, student, New York School of Social Work, receiving her field work training at the Presbyterian Hospital; "Tessie Romano" (student record), submitted by Florence Hoskinson, student, New York School of Social Work, receiving her field work training at the Presbyterian Hospital.

Perhaps the outstanding contribution to the progress of social work and health during the past year has been the report of the White House Conference on child health and protection. The recommendations of this committee are a real chal-

lenge to the medical social workers of the country and the responsibility for medical social participation in the child health program is clear.

Dr. Henry F. Helmholz, Mayo Clinic, Rochester, Minn., and a member of the follow-up committee of the White House Conference presented a general report of the medical section, pointing out the present knowledge in the field of child health and the more important next steps in making this knowledge effective and useful. He placed a responsibility for participation in the general child health program upon medical social workers.

What the Medical Committee Recommends

Ida Cannon, chairman, medical social service committee and also a member of the follow-up committee, gave a stimulating and interesting report on the outstanding results of the committee's investigations and its recommendations. She pointed out the need for the intensive development of medical social work through better definitions of appropriate activities and also the importance of extensive development only when qualified personnel and acceptable quality of service are possible.

The recommendations of the committee include continued study in the general field of medical social work with especial emphasis on the contribution of medical social work to the general health of the child. Miss Cannon feels that the joint planning of the medical and social groups on this committee and the working together have brought about a challenging and stimulating program.

Local members of the association in Minneapolis made the meeting a delightful one through their many hospitable and gracious invitations. The Lake Region of Minneapolis supplied a delightful background. Dr. Ernest S. Mariette and Margaret Ridler of the Glen Lake Tuberculosis Sanatorium, Oak Terrace, Minn., entertained 300 social workers at tea in the spacious auditorium of the hospital.

The women's auxiliary of the Hennepin County Medical Society entertained the medical social workers at tea in the charming rooms of the medical society in the Medical Arts Building, Minneapolis.

The Association of Hospital Workers is one of the many associate groups of the National Conference of Social Work. There were in all about 3,500 delegates attending the national conference.

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NEWS OF THE MONTH (Cont'd)

International Congress in Vienna Attracts 600 Delegates

THE second International Hospital Congress, which was held in Vienna, June 8 to 14, was attended by 600 delegates representing all of the important nations of the world. The largest representation came from the Central European countries.

The American group included: Dr. J. L. McElroy, superintendent, Medical College of Virginia Hospitals, Richmond, Va.; the Rev. M. F. Griffin, vice-president, Catholic Hospital Association, and trustee, American Hospital Association, Cleveland, and his sister, Helen Griffin, also of Cleveland; Dr. Walter H. Conley, retired commissioner of hospitals for New York City, and trustee, American Hospital Association, Villa Stella, Ave. Claude Vignon, St. Jean-Cap-Ferrat, France; Dr. E. M. Bluestone, director, Montefiore Hospital, New York City; Dr. C. W. Munger, director, Grasslands Hospital, Valhalla, N. Y.; John F. Bush, executive secretary, Presbyterian Hospital, New York City; Reuben O'Brien, superintendent, Manhattan Eye, Ear and Throat Hospital, New York City; Dr. I. Newmann, Hospital for Joint Diseases, New York City; Edward F. Stevens, architect, Boston; Dr. H. B. Anderson, superintendent, Conemaugh Valley Memorial Hospital, Johnstown, Pa., and Mrs. Anderson; Dr. G. H. Williamson, Theda Clark Memorial Hospital, Neenah, Wis.; Pearl Rexford, superintendent, Northwestern Hospital, Minneapolis; Harriett S. Hartry, superintendent, St. Barnabas Hospital, Minneapolis; Magdalena M. Rau, superintendent, St. John's Hospital, St. Paul, Minn.; Anna K. Vogler, superintendent, Flower Hospital, Toledo, Ohio; Bertha W. Mears, superintendent, Princeton Hospital, Princeton, N. J.; Dr. Samuel Weiss, Jewish Memorial Hospital, New York City.

On the morning of June 8 the delegates assembled in the great hall of the New Palace and were greeted by the president of Austria, the prime minister and the mayor of Vienna, whose speeches were broadcast by radio.

The sessions of the Congress were held from Tuesday to Saturday in the morning at the head-

quarters of the Vienna Medical Society. The committee reports and the papers that were read at these sessions were published in advance in a supplement to the new international hospital review, *Nosokomeion*, and included the following subjects: "A Study of Construction Costs in Hospitals," H. Distel, Hamburg, with separate reports of studies made in Great Britain and Ireland by C. Ernest Elcock, London, in America by Edward F. Stevens, Boston, and a commentary by Dr. Hans Frey, Bern; "Some Observations on the Ratio of Nurses to Patients," Christiane Reimann, Geneva; "Hospital Terminology and Definitions," by Dr. J. Wirth, Frankfurt, with a supplement entitled "The Scientific Basis of Mortality Statistics," by Dr. H. B. Logie, New York City; "Legal Aspects of Hospital Service," M. W. H. Harper, Wolverhampton; "Auxiliary Hospital Activities," J. L. C. Wortman, Hilversum; "The Problem of Per Capita Cost," M. Gouachon, Lyon; "The Dietetic Problem in Large Hospitals," Dr. Karl von Noorden, Vienna; "The Place of Neurology and Psychiatry in the General Hospital," W. Alter of Düsseldorf; "The Influence of Health Insurance on Hospital Practice," Dr. T. B. Layton, London; "Dispensaries," E. H. L. Corwin of New York City.

René Sand Elected President of Association

At the final session of the congress the International Hospital Association was organized and Dr. René Sand of Brussels was elected president for a term of six years, while Prof. Julius Tandler of Vienna was elected vice-president and Dr. E. H. L. Corwin of New York City, secretary general.

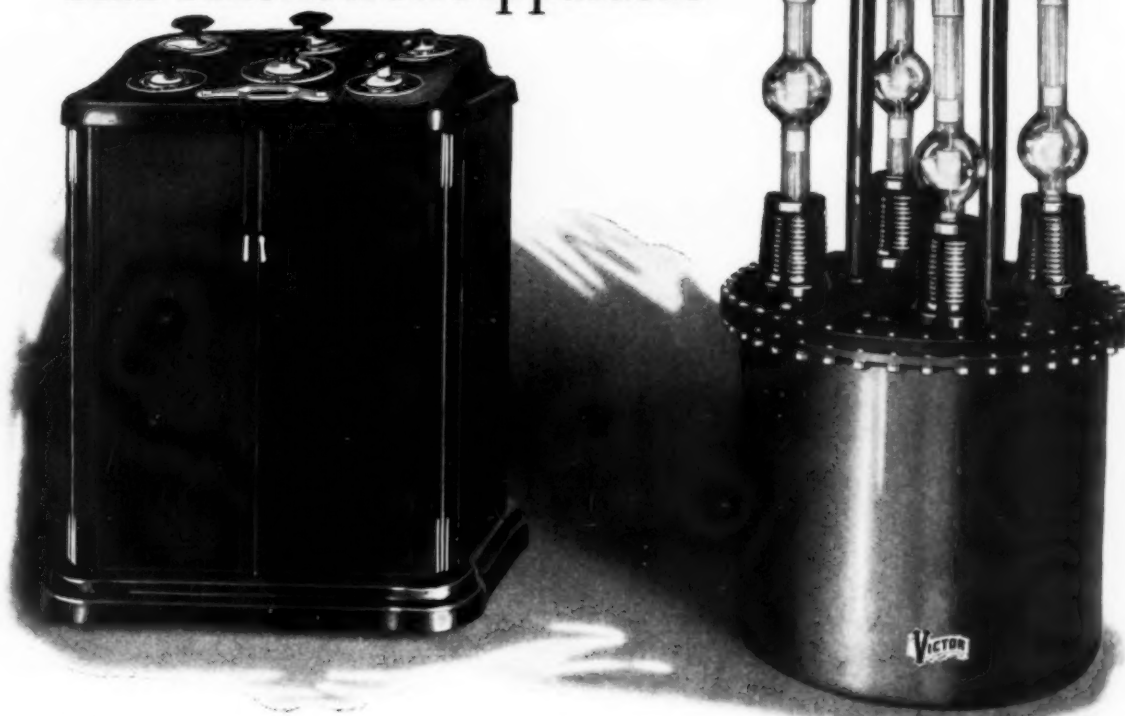
On the evening of June 12 the American delegates were the guests of Sir Harold Pink, president, British Hospitals Association, and the British delegates, at a dinner in the Hotel Bristol.

Another official function for the delegates was the tea given by the mayor of Vienna, in the dining hall of the Rathaus of Vienna.

There was no hospital exhibit.

Radiographs in 1/120th sec.

at 1000 ma. with Victor
KX-1 Kenotron Apparatus



ABOUT ten years ago Dr. W. D. Coolidge, in the Research Laboratories of the General Electric Company, made radiographs with 1000 ma. of tube current. Roentgenologists who viewed these radiographs recognized immediately the vastly increased diagnostic value with this high milliamperage, as it permitted high speed radiography at comparatively low voltages—speed sufficient to arrest involuntary motion of the heart, lungs, stomach, etc.

At a subsequent x-ray meeting in Chicago this series of 1000 ma. radiographs was exhibited by Dr. Coolidge, and the interest manifested proved conclusively that roentgenologists awaited the day when equipment of this capacity would become available for certain classes of work.

But it is a long step, sometimes, between an experimental set-up in the research laboratory and the apparatus eventually developed for practical use. In the years intervening a vast amount of further research and experimental engineering has entered into these two developments, which until now could not be announced. Obviously the handling of this large amount of energy demands apparatus of utmost precision and automatically true in performance in order that it be thoroughly practicable in the hands of the average operator.

When it may be said that with this Victor equip-

ment one can obtain radiographs in 1/120th second, with as high as 1000 ma. tube current, realizing a diagnostic quality unprecedented in the x-ray art, and with greater simplicity and more consistent duplication than has been possible with the so-called high milliamperage technics up to the present—then can one appreciate what research in physics and engineering has again contributed to medical science.

The apparatus proper employs four Kenotron Valve Tube Rectifiers known as the KR-3 type, the first of the Kenotron series to prove acceptable to Victor engineers as sufficient for the requirements of modern x-ray equipment. An ingenious control (magnetic) system coupled with this Kenotron, together with a transformer of extraordinary efficiency, have made possible the positive, unfailing performance mentioned in the preceding paragraph.

This equipment is now in production and installations are being scheduled in the sequence of orders placed. Further particulars will be gladly given.

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NEWS OF THE MONTH (Cont'd)

Eminent Hospital Leaders Honor Frank E. Chapman

The funeral of Frank E. Chapman, director of administration, University Hospitals, Cleveland, was held July 14 at the university chapel of Western Reserve University.

The chapel was filled with friends of Mr. Chapman and the services were conducted according to the ritual of the Episcopal Church.

Following the ceremony, the Rev. Maurice Griffin, pastor of St. Philomena's Catholic Church, Cleveland, and a trustee of the American Hospital Association, delivered the eulogy.

Father Griffin said in part:

"Drawn within the radiant circle of his friendship, working with him these many years and relying on his stalwart manhood and knowing the nobility of his character, the generosity of his nature and the depth of his sincerity, we of the hospital associations in city, state and nation, in grateful appreciation of the distinctive contribution he has made to this cause, have assembled from far and near to pay tribute to the memory of the man who has passed.

"A man among men was he, resplendent in all the natural virtues. A friend who grappled his friends to his heart with bands of steel, loyal ever and true. Plain spoken, outspoken, open minded, open handed, unostentatious, ambitious only to serve, impatient only with stupidity, intolerant only of hypocrisy; with the iron will of the warrior, the golden intellect of the student, the sensitive soul of the artist, the simple heart of the child.

"And we shall cherish this memory of him: rising to the eminence of his exalted position in the hospital world, treading the perilous heights of public duty, standing in the fierce light that beats against the throne, supremely confident that the sharpest dart can find no flaw within his armor nor the brightest ray one spot upon his shield. As a plumed knight he had ridden forth well armed and unafraid, the exponent of organization, the champion of a higher standard of service to suffering humanity. He had ridden forth in the days of his youth to do battle with the forces of physical evil, and though wounded and broken in health he had struggled on under the crushing burden of almost constant pain, and had fought in the lists until death."

Among the active and honorary pallbearers well known in the hospital field were the following: Dr. A. C. Bachmeyer, superintendent, Cincinnati General Hospital, Cincinnati; Guy Clark, Cleveland Hospital Council; John Mannix, assistant director, University Hospitals, Cleveland; Paul Fesler, president, American Hospital Association; Dr. B. W. Caldwell, secretary, American Hospital Association; Ira Dodge, superintendent, Marietta Hospital, Marietta, Ohio; Dr. Harry L. Rockwood, director, Mt. Sinai Hospital, Cleveland; Dr. R. C. Buerki, director, Wisconsin General Hospital, Madison; Dr. O. F. Ball, president, The Modern Hospital Publishing Company; John A. McNamara, executive editor, THE MODERN HOSPITAL and other representatives of the field.

Mr. Chapman's body was cremated, according to his own wishes. He is survived by his widow, Vida May Black Chapman, and his daughter, Elizabeth.

Coming Meetings

American College of Surgeons.

President, Dr. C. Jeff Miller, New Orleans.

Director general, Dr. F. H. Martin, Chicago.

Next meeting, New York City, October 12-15.

American Dietetic Association.

President, S. Margaret Gillam, University Hospital, Ann Arbor, Mich.

Business manager, Dorothy I. Lenfest, 25 East Washington Street, Chicago.

Next meeting, Cincinnati, Ohio, October 19-21.

American Hospital Association.

President, Dr. L. A. Sexton, Hartford Hospital, Hartford, Conn.

Executive secretary, Dr. Bert W. Caldwell, 18 East Division Street, Chicago.

Next meeting, Toronto, Sept. 28 to October 2.

American Occupational Therapy Association.

President, Dr. Joseph C. Doane, Jewish Hospital, Philadelphia.

Secretary-treasurer, Mrs. Eleanor Clarke Slagle, 175 Fifth Avenue, New York.

Next meeting, Toronto, September 28 to October 2.

American Protestant Hospital Association.

President, Dr. B. A. Wilkes, Hollywood Hospital, Hollywood, Calif.

Executive secretary, Frank C. English, D.D., Hyde Park, Station O, Cincinnati.

Next meeting, Toronto, September 25-28.

American Public Health Association.

President, Dr. Hugh S. Cumming, Washington, D. C.

Next meeting, Montreal, September 14-17.

Association of Record Librarians of No. America.

President, Mrs. Jessie Harned, Rochester General Hospital, Rochester, N. Y.

Corresponding secretary, Ruth T. Church, Boston City Hospital, Boston.

Next meeting, New York, October 12-16.

Highland Hospital

uses soft water to keep boilers scale-free



The Highland Hospital, Oakland, California

THE Highland Hospital at Oakland, California, is one of the country's most up-to-date institutions. With its 395 beds and nurses' training school it makes a sizable problem in hospital management.

One thing, however, that Dr. B. W. Black, Medical Director, did not have to worry about was hard water forming scale in his boilers, for a Permutit Water Softener delivering 36,000 gallons of soft water every 3 hours had been built into the hospital in December, 1926.

Besides the boilers, however, this soft water was only used for hot water service, so that they shortly discovered hardness was depositing

in their cold water lines, and was causing trouble in steam tables and sterilizers. Naturally, they switched everything over to soft water and the troubles disappeared.

Of course, their boilers, having been operated on soft water from the day that they were first fired, still remain clean and free from scale. They are opened only for inspection and washing.

How much trouble and expense this hospital has saved!

In the same way, you can benefit from the economies of soft water. Wouldn't you like to know more about it?

B. W. BLACK, M.D.

Medical Director

says: "When the Highland Hospital opened, we were using the Permutit Water Softening System on our hot water supply only. After several months we found quite a bit of scale forming in sterilizers, steam tables, and other equipment that were fed by the cold (hard) water, and decided to change it all over into soft water. Since doing that, we have had no trouble.

"Our three 200 H. P. Heine water-tube boilers, after nearly five years of operation, are in good condition. The drums are wire-brushed and washed every ninety days. The tubes have never been touched, except by hosing, and as there has been no need for turbinizing it, we have never had to disturb a key-cap."

We have written a very interesting booklet, "Reducing Costs and Improving Hospital Service with Soft Water," and shall be glad to send you a free copy. Just fill out and mail the attached coupon, no obligations.

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Please mail me a copy of your free booklet, "Reducing Costs and Improving Hospital Service with Soft Water."

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TWENTY-THREE SALES OFFICES THROUGHOUT THE UNITED STATES

NEWS OF THE MONTH (Cont'd)

University of Kentucky Announces Course for Laboratory Workers

With the opening of the fall term of the 1931 school year at the University of Kentucky in September, the department of bacteriology will inaugurate a new four-year course in medical technology for the benefit of prospective workers in hospital laboratories, in physicians' and surgeons' clinics and in Federal, state and municipal laboratories, as well as for the benefit of those students who will require a technical knowledge necessary to carry on research work in the field of medical bacteriology.

It has also been arranged by the department of bacteriology that students who wish to undertake this course but who also may have in mind preparation for a medical college, may make substitutions to meet the entrance requirements of Class A medical colleges. However, this course has been designed to train men and women to use scientific laboratory methods to assist the medical profession in the diagnosis and treatment of disease and not to prepare them for entrance to medical colleges or for the practice of medicine.

Noted Hospital Administrator of Holland Dies

Dr. W. H. Mansholt, director, University Hospital, Groningen, Holland, died recently on the eve of the opening of the International Hospital Congress in Vienna. He was fifty-nine years old.

Doctor Mansholt was born and educated in Groningen and rose to leadership in his specialty in Holland. He achieved international prominence by virtue of his thoughtful grasp of international hospital affairs.

New Clinic for Children Dedicated in Cincinnati

The Research and Clinic Building of the Children's Hospital Pediatric Research Foundation, Cincinnati, was dedicated recently, in the presence of men and women prominent in the field of pediatrics, education, child health and social welfare

from all parts of the country. Dr. A. Graeme Mitchell is director of the foundation.

The building, erected as a wing of the Children's Hospital at a cost of \$800,000, was given by Col. William Cooper Procter in addition to \$3,000,000 with which he established the research foundation "to provide for and carry on investigation, research and development, both medical and scientific, for the benefit of the children, including investigation and research with reference to children's diseases, problems of children's nursing and children's social welfare."

The building contains laboratories for chemistry, bacteriology, and metabolism; animal quarters, a complete set of shops for making and repairing instruments, many of which must be invented as necessity demands; a complete medical illustration and photography unit, and a model out-patient clinic, so designed that from the time a child patient enters until the time he leaves there will be no contact with any other patient.

University Now Supplies Interns on a Quarterly Plan

Graduates from the University of Tennessee College of Medicine are now available for internships in September, December and March as well as in June in accordance with a quarterly graduating plan now in effect at the college.

Concerning the plan, O. W. Hyman, administrative officer, writes: "I believe that hospitals would enjoy a decided advantage if interns were available throughout the year. It would then become possible for hospitals to place their interns upon a graduated rather than a rotating basis, and to admit interns each month, each quarter or as frequently as the service might permit. In this way, hospitals would not have a large group of inexperienced interns entering upon the service all at once. The advantages offered to the hospital by the four-quarter plan of instruction and the consequent quarterly graduation of students are worthy of consideration."

The University of Tennessee now graduates from twenty-five to thirty-three medical students in September, December, March and June. The college of medicine is given a Class A rating by the American Medical Association and the Association of American Medical Colleges.

Lambert Bassindale
St. Paul Architect



Healy Plumbing & Heating Co.
St. Paul Contractor

Northern Pacific Beneficial Association Hospital Saint Paul

was equipped with the Johnson System of Heat & Humidity Control in 1921. The installation includes 105 Johnson wall thermostats controlling 162 radiator diaphragm valves, on a vacuum heating system each room separately controlled.

This hospital is owned by the Beneficial Association of the Northern Pacific Railroad; which also owns two other similar institutions — both of them equipped with The Johnson System of Heat & Humidity Control . . . for automatically maintained temperature accuracy and for correct individual room condition, and for the large fuel economy produced each year.

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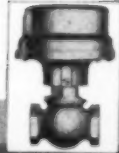
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(Two Temperature)
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JOHNSON HEAT AND HUMIDITY CONTROL

NEWS OF THE MONTH (Cont'd)

Nurse Placement Service for Midwest Is Organized

A nurse placement service has been established in the Midwest for the definite purpose of finding positions for nurses and allied workers and of giving vocational guidance.

The service will be inaugurated September 1 at the headquarters of the Illinois State Nurses' Association, 1520 Willoughby Tower Building, 8 South Michigan Boulevard, Chicago. Temporary arrangements have been made with the Central Council for Nursing Education for the part-time service of its executive secretary, Evelyn Wood, to direct the work.

The nurse placement service is a nonprofit organization created and operated by an executive committee composed of representatives of the Midwest division, American Nurses' Association, which includes Illinois, Indiana, Iowa, Michigan and Wisconsin.

Dr John O. Polak, Eminent in Medical Circles, Dies

Dr. John Osborn Polak, outstanding physician of Brooklyn, N. Y., died suddenly on June 29.

Doctor Polak was eminent in the fields of surgeon and gynecology. Only three months before his death he had been elected as president of the board of regents, Long Island College Hospital, Brooklyn, the hospital in which he had served his internship.

Doctor Polak served as chairman of the committee on maternal and early infant care of the recent White House Conference on Child Health and Protection.

Expansion Planned for South Side Hospital, Pittsburgh

The South Side Hospital, Pittsburgh, has decided to proceed as promptly as possible with the reconstruction of the hospital which is to be expanded to a capacity of 330 beds.

The plan for reconstruction revolves about the most substantial of the institution's existing buildings, to which an L-shaped addition of considerable

height is to be added in such a manner as to create a symmetrical whole. Provision is made for dispensary extension, for a series of wards of moderate size for industrial work, for a modernized pediatric service, for additional private rooms and for a central laboratory and a new x-ray department. The proposed construction includes also a new administrative office, a new kitchen and dining rooms and other buildings.

The plans for the new building are being developed by Press C. Dowler, Pittsburgh, architect, in association with Dr. S. S. Goldwater, New York City, consultant. Jeannette L. Jones, superintendent of the hospital, and a building committee headed by L. F. Koenig, chairman, and John E. Roth, president of the hospital, are taking an active part in the work.

Crippled Children's Hospital Given to University of Chicago

The Gertrude Dunn Hicks Memorial Hospital for crippled children, University of Chicago, has been formally dedicated. Mrs. Hicks, the donor, presented the hospital and Robert Maynard Hutchins, president of the university, accepted it on behalf of the school.

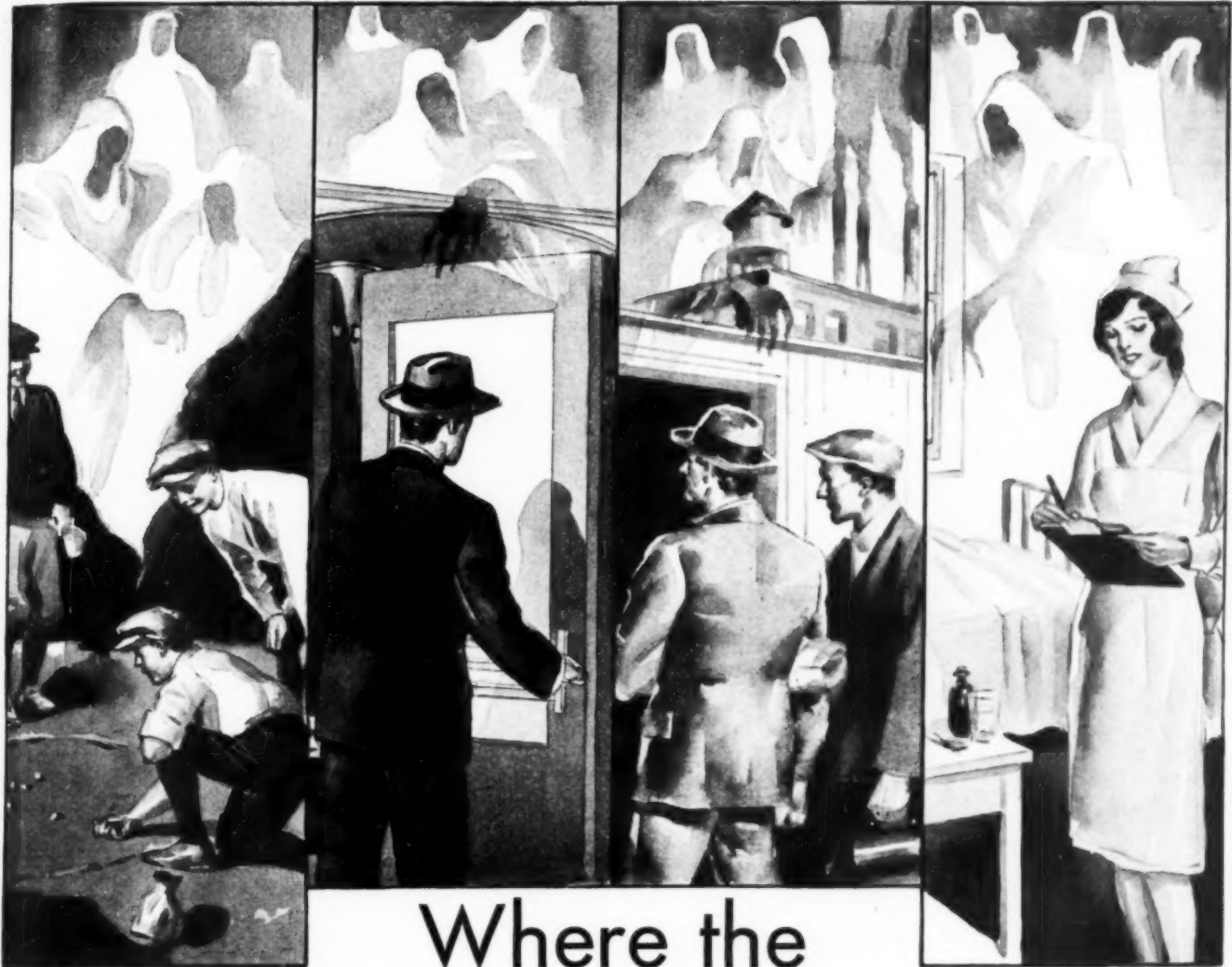
The new building, which cost \$356,000, is the fourth children's unit erected in the university clinics in the last two years.

First of Specialty Hospitals to Be Erected at Medical Center

A hospital with a bed capacity of 114 is to be erected at the Columbia-Presbyterian Medical Center to provide facilities for the treatment and hospital care of all classes of eye patients. It will provide also for the teaching of medical students and the training of nurses in this specialty and for routine study and advanced research in this branch of medicine.

The structure, a twelve-story building, is the gift of Edward S. Harkness. It is the first unit in a projected group of specialty hospitals connected with the medical center.

Provision has been made for beds at all rates, from free ward beds to costly private suites.



Where the Deadly Legions Gather He Fights Your Battle

Every school, industrial plant, hospital, public building and similar place where humans gather is a potential rallying ground for the unseen legions of mankind's greatest enemy.



Wherever sanitation may be an acute problem, the Clow Soldier of Sanitation is your logical ally. Call him in. With his long experience and his complete line of specialized fixtures he naturally is, and can afford to be, unbiased in his ideas. This is George Weiss, Highland Park, Ill.—Northern Illinois Territory.

To "defeat" the germs that make up this army—and to lower the costs through the years—through proper plumbing facilities, has been the job of the Clow Sanitation Soldier since 1878.

It was a Clow Man who was called into a prominent Southern city when Typhoid had all but won the battle.

It was a Clow Man who was drafted into Cuba as an important ally against the deadly legions of Malaria.

Today these Clow Soldiers of Sanitation carry on, less spectacularly, but even more scientifically and effectively. They have

developed the Clow-Madden Automatic Closet for schools and public places. They have given us the sanitary drinking fountain. And they have developed a wide variety of fixtures to meet special and dangerous sanitary conditions.

52 years of experience in the battle against pollution, ill-health, and uncleanness give the Clow Soldiers unmatched knowledge of mass plumbing needs.

The largest line of specialized fixtures, carefully built, help them help you to meet any requirement no matter how specialized or acute.

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PREFERRED FOR EXACTING PLUMBING SINCE 1878

Consult your architect

PERSONALS

DR. WILLIAM A. DOEPPERS, superintendent, Indianapolis City Hospital, Indianapolis, Ind., has resigned and will be succeeded by DR. CHARLES W. MYERS.

DR. M. F. STEELE has resigned the superintendency of the Methodist Hospital, Ft. Wayne, Ind., to specialize in x-ray diagnosis and treatment.

ELIZABETH P. NAYLOR, for the last five years director of nursing at Hahnemann Hospital and West Side Hospital, Scranton, Pa., has been appointed superintendent, Waldo County Hospital, Belfast, Me.

DR. JOELLE C. HIEBERT has recently assumed the duties of superintendent, Central Maine General Hospital, Lewiston. DOCTOR HIEBERT, who was formerly superintendent, Medical Mission dispensary, Boston City Hospitals, Boston, succeeds DR. LEWIS F. BAKER.

MRS. J. P. FERGUSSON is the newly appointed superintendent, Davis Hospital, Pine Bluff, Ark., succeeding GLADYS COLLINS.

THE REV. THOMAS BRENNAN is the newly appointed superintendent of St. Elizabeth's Hospital, Brighton, Mass.

DR. HOMER L. AUSTIN, for the last two years head of the division of hygiene of the Ohio State Department of Health, has been appointed assistant superintendent, Clark County Tuberculosis Sanatorium, Springfield, Ohio.

BERYL ANSCOMBE has been appointed superintendent of the new Menorah Hospital, Kansas City, Mo., which opened August 1. MISS ANSCOMBE is the sister of E. MURIEL ANSCOMBE, superintendent, Jewish Hospital, St. Louis.

JESSIE JOYCE is the newly appointed superintendent of the John McDonald Hospital, Monticello, Iowa. MISS JOYCE was formerly connected with the Ida Grove General Hospital, Ida Grove, Iowa.

DR. JOSEPH E. JENSEN, Momence, Ill., is the recently appointed medical director, Woihinu Hospital and Pahala Plantation Hospital, Hawaii.

THE REV. J. E. BENZ, chaplain, Bethesda Hospital, Cincinnati, has been appointed superintendent, Methodist Episcopal Deaconess Hospital, Louisville, Ky., to succeed NINA M. DENVER, who has resigned.

LUELLA M. COX, superintendent, Gary Methodist Hospital, Gary, Ind., for the last four years, has resigned. She is succeeded by DR. JOSEPH L. ANDERSON, for ten years assistant superintendent, Wesley Memorial Hospital, Chicago.

DR. TAEKE BOSCH is the newly appointed medical superintendent, Christian Sanatorium, Wyckoff, N. J. DOCTOR BOSCH recently returned from China where he was superintendent of the Amoy hospitals.

DR. CALHOUN DOLER, Elk City, Okla., is the newly appointed superintendent, Western Oklahoma State Tuberculosis Sanatorium, Clinton, Okla., succeeding DR. ELMER E. DARNELL, resigned.

DR. ROBERT B. NYE has been appointed director of the Curtis Clinic, Jefferson Medical College Hospital, Philadelphia. DOCTOR NYE has been for the last two years chief resident physician, Jefferson Hospital.

J. DEWEY LUTES, superintendent, Lake View Hospital, Chicago, has been appointed superintendent of Ravenswood Hospital, Chicago, to succeed the late E. E. Sanders.

ANNA H. DAVIDS, superintendent, Lincoln Hospital, Lincoln, Neb., for the last three years, is the new superintendent of the Ellen Fitzgerald Hospital, Monroe, N. C.

JOHANNA HANSON is the new superintendent and head of the nurses' training school, St. Olaf Hospital, Austin, Minn.

CHARLES G. BECK has been appointed manager of veterans' administration of the United States Veterans Hospital, Lincoln, Neb.

DR. HARRIET CLISBY, the oldest woman physician in the world, died recently at her home in London. She celebrated her hundredth birthday last August.

"HOW DO THEY Treat you?"

visitors ask patients

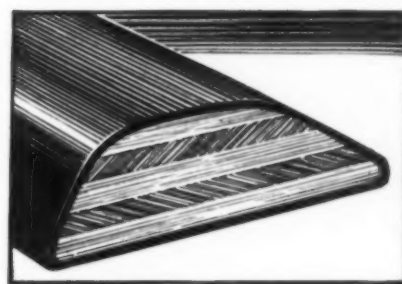
"OH, they treat me all right, but —" How patients do pick on details. Often they criticise the Toilet Seats as old and unsightly. They do not understand that the very process of disinfection and cleaning is responsible for the worn-off surface, the cracking and the discoloration of ordinary toilet seats. The one sure way to prevent such criticism is to install Whale-bone-ite Seats that no amount of use or cleaning can reduce to an unsightly condition.

Have a tour of inspection made. Have every toilet seat in the hospital looked at. Get a report on their condition. Get rid of old-fashioned, worn-out, unsightly seats and install handsome new Whale-bone-ite Seats in their place.

Whale-bone-ite always looks new, clean and inviting no matter how much it is used, cleaned or abused. It keeps its beautiful appearance forever. Once installed, Whale-bone-ite never has to be replaced. It is guaranteed for the life of the building, ending your replacement expense once for all.

*Send Coupon for New Book
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To insure proper toilet seats in present buildings or new hospitals, get the complete story of Whale-bone-ite Seats as told in this new book. No cost or obligation. Send coupon today. Address, The Brunswick-Balke-Collender Co., Dept. M 16, 623-633 So. Wabash Avenue, Chicago, Ill.



WHALE-BONE-ITE CROSS-SECTION

In this cross-section note the cross-grain, laminated construction, exclusive with Brunswick, that gives Whale-bone-ite a super-strength that defies time and abuse. It is the only construction that combines unbreakable strength with necessary lightness and sanitary qualities.

Jet-black, glass-smooth and diamond-hard, Whale-bone-ite beauty never wears off seat or hinge. Unaffected by acids, disinfectants and cleaning fluids. No exposed metal hinges to corrode, to collect dirt or need polishing. No cracks to harbor dirt and germs. Easy to keep clean and sanitary with minimum effort. Non-inflammable. With all these advantages, Whale-bone-ite costs no more than the cheapest moulded composition seat made.

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IT TAKES A WHALE OF A SEAT TO STAND PUBLIC TOILET ABUSE

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by ANNA E. BOLLER, Central Free Dispensary at Rush Medical College, Chicago

The Dietitian's Place in the New Diabetic Regimen

By H. J. JOHN, M.D.
Cleveland Clinic, Cleveland

TO SPEAK of diabetes is to speak of diet. And in speaking of diet we immediately think of the dietitian, who is trained in this special field and whose services are becoming more and more valuable and necessary.

The field of dietetics is a specialized service but let us hope that it will not become a field of super-specialization which has been aptly defined as "knowing more and more about less and less." As in the field of medicine to-day we need more well grounded medical men with a broad outlook on medicine at large rather than one-sided specialists who do not have a broad medical foundation, so we shall always need more and more well trained and broad minded dietitians.

We need dietitians who do not think always in terms of textbooks, of calories, of ketogenic-anti-ketogenic ratios or of vitamins; dietitians who do not regard the patient as a receptacle into which certain foods are virtually dumped according to certain formulas and fads of the day; dietitians who, while thoroughly understanding the principles of all these newer investigations, can still view the patient as an unfortunate fellow being and, with this understanding as a start and as the goal, can plan their routine for the patient to his advantage and thus help to tide him over his difficulties.

Before the insulin era, the treatment of diabetes was purely dietary. There was nothing else to resort to. The patient's diet simply had to be reduced to the quantity he was able to metabolize or, in other words, to the quantity of endogenous insulin the patient had available. We could not

go farther than this. If we did, the diabetes became more severe and the condition progressed. For those in whom the diabetes was mild, the routine was not difficult since the restrictions also were mild. Those with severe diabetes on the other hand fared badly. Their diet had to be reduced to such an extent that it meant a gradual starvation until the end came and relieved them from an existence that was hardly worth the effort.

In 1922, we entered upon a new era following the discovery of insulin by Banting and Best. The internal secretion of insulin, which in the diabetic was diminished or lacking, was replaced by this gift to this group of suffering humanity. The discovery of insulin meant a red letter day for diabetics and it was hailed with joy by the medical profession all over the world.

Nearly ten years have elapsed since the advent of insulin and we can now look back and see what has been accomplished.

Have we left behind the dietary principles of the treatment of diabetes? Not at all. Diet to-day is as important a problem for the diabetic who takes insulin as it ever was. Without proper diet, with insulin alone, life may be prolonged, but it will not be sustained throughout the normal span. With proper diet, or with diet and insulin, the diabetic individual has a reasonable assurance that he will live out his normal span of life in comfort.

Another question that might be asked is this: Have we reduced the mortality from diabetes? We have not. But diabetics who die do not die

Digestibility is—indeed—a most important factor in a diet; and especially important in preparing the “protective” foods...



Van Camp's **PURÉED** Foods are *easy* to digest and—because of that—are extraordinarily nourishing

SCIENTIFIC DETERMINATIONS of human food requirements so often approve established habits of eating handed down through many generations; and yet a curious confusion sometimes tends to supplant beneficent habits with practices supposed to be dictated by newer scientific understanding.

Thus, raw foodstuffs have had a considerable popularity—partly through reasoning that primitive man, supposedly superior in health and strength, lived largely upon them; and partly because the first discoveries concerning vitamins indicated that these values were necessarily destroyed by cooking.

SUMMER DIETS require easy digestibility

Summer complaints are not confined to infants—though they may be more vociferous about their discomforts—and may more obviously suffer.

Many a suffering adult whose ailments may have far-reaching effects, not only upon himself but his entire family, would avoid physiological strain by the simple device of eating only easily-digested foods in hot weather. Cold foods—like cold drinks—are apt to be irritating in many ways—and especially to be poorly digested—hence poorly utilized.

Van Camp's **PURÉED** Foods are ideal hot-weather foods for persons of all ages—and our new “Recipes for **PURÉED** Fruits and Vegetables, with Protective Diet Menus” gives scores of easy and appetizing ways for serving them.

nutritious and easy to digest—**IDEAL** for infant feeding and smooth diets

PURÉED
SPINACH • PEAS

TOMATOES
CARROTS

with **PURÉED** Tomatoes
and Beef Broth

MIXED VEGETABLES
with Beef Broth

PRUNES • APRICOTS

Alvarez calls upon Hippocrates to witness that the rough grains and raw foods of primitive peoples proved a great handicap to their well-being, and himself comments that the discoveries of vitamins have impressed themselves so strongly upon our imaginations that “many of us seem quite to have lost sight of one of the most important factors in a diet—and that is its digestibility.”

“Cookery and Digestibility”* is succinctly reviewed in the Journal of The American Medical Association, showing most interestingly how some human habits of eating, tested by many generations of practice, are further approved by thorough scientific understanding.

It is now very clear that the “protective” foods when *properly* cooked to avoid destruction or wasting of vitamin and mineral values, are considerably more nourishing than in the raw state. That, of course, is because the cooked form is

more digestible—and the food values therefore more efficiently utilized.

Van Camp's **PURÉED** Foods are delicious preparations of some of the most valuable protective foods, and the **PURÉED** form is especially easy to digest. A special precision process divides the fibrous structures very minutely without crushing the cell walls and expressing the contents. Thus the nutrients of practically every cell are made easily available for metabolism, yet they are protected against changes of flavor and color during cooking.

Biological assays for vitamins, and chemical analyses, demonstrate the high nutritive values of Van Camp's **PURÉED** Foods. The mineral salts and natural vitamins normal to each of the raw materials are excellently and uniformly conserved in the finished products—and each Van Camp **PURÉED** Food is *easy to digest*.

Scientific studies and the common experience of all mankind both show that the “normal” diet for persons of all ages requires—for complete nutrition—adequate quantities of the “protective” foods—milk, fruits and vegetables—in *digestible forms*.

VAN CAMP'S • INDIANAPOLIS

*Editorial, Journal of The American Medical Association, Vol. 96, No. 24 (June 13, 1931), page 2038.

Have You Seen Samples? We will be pleased to supply samples of Van Camp's **PURÉED** Foods to physicians and dietitians who have not examined them, sending “The Literature of the Medical Profession and Allied Sciences Concerning Food,” and other publications of practical value in condensing the newer knowledge of nutrition.

because of the use of insulin, but because of the abuse of it. The use of a powerful medicament such as insulin requires careful consideration. A razor is a useful article in the proper hands and a dangerous one in the hands of a child who does not understand its use. This is also true of insulin. Even doctors expect miracles from its use. Unfortunately, insulin is not a miracle producing hormone. If it is used properly it will do a great deal for the patient, but if abused the contrary is true.

Uses and Abuses of Insulin

Imagine a patient with severe diabetes whose routine has been adjusted to a certain dietary regimen with say 10 units of insulin three times a day, an amount sufficient to keep the condition under control. The patient develops a cold or some other infection. Automatically the routine is all upset, the blood sugar soars, the patient begins to excrete large quantities of sugar and acidosis develops. During such a period the dose of insulin must be doubled and often trebled in order to control the disease. What often happens is this: A sick person will eat little or nothing, and either the family or the doctor reasons that because the patient is not eating his full meals it is dangerous to give him insulin, and promptly the insulin is discontinued. In a short time the patient is in coma and finally he is rushed to the hospital when he is already moribund.

Another frequent occurrence is the "spree." Diabetic patients will go on big parties, hoping to compensate for the extra food by taking a bit more insulin, thus upsetting completely the improved condition it has taken months to build up. For a while they live in the happy delusion that everything is all right. A rise of blood sugar does not cause any distress or pain as a warning. Later the advanced changes come about and the inevitable penalty follows.

When we consider the progress that has been made in the care of children afflicted with diabetes, we can feel a certain amount of satisfaction and encouragement. Before the insulin era, nearly all diabetic children died. It was only a matter of time. They had no future to look forward to. Whether or not the family had money, the picture was the same. Diabetic children now are a healthy looking group of youngsters, doing everything that other children are doing, and on the whole doing it better, for diabetic children are mentally bright.

This year I have observed several of these patients over whom I have watched for a number of years. They are now students in college and many of them are honor students. Diabetic girls who

formerly were sterile are now bringing forth healthy babies—an impossibility in the past. Life is theirs—for a price, true enough—but a life full of promising outlook.

Now let me say a few words about the dietitian's part in this problem. The dietitian has the heaviest end of the responsibility because diet is and always will be the basic principle in the treatment of diabetes. To do the work well not only requires a thorough knowledge of the basic principles of dietetics but, first of all, the dietitian must love her work. The dietitian's profession is a mission, as is the physician's profession. An ideal must permeate her work if she is to find joy and happiness in the performance of her duties.

A diabetic patient's diet is naturally restricted. He is allowed less food than he used to have. This readjustment of lifelong habits is not always easy. Consequently the transition must be made as easy as possible, and ingenuity is necessary in planning meals and in serving them attractively. Much can be done in this way to comfort the patient and make his lot easier.

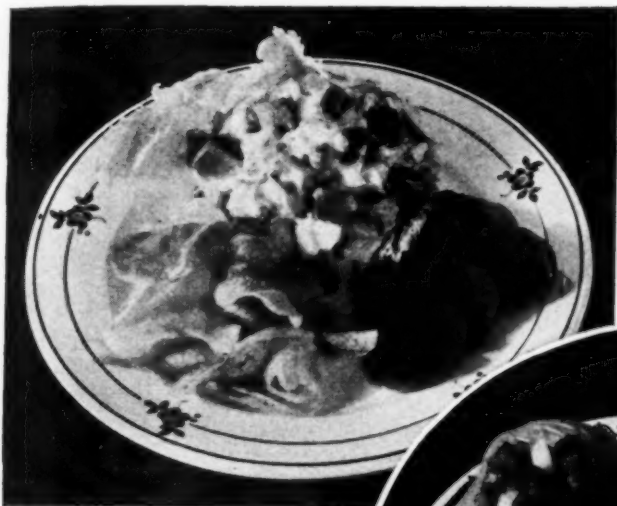
In general, there are many weaknesses in our present day hospital routine. One of the weaknesses appears to be that the patient in the hospital is but an incident; everything is organized for the convenience and the efficiency of the hospital services. The patient who probably has not been able to go to sleep until the early hours of the morning because of the pangs of hunger is beginning to sleep. Six o'clock comes and the night nurse rushes in to wake him, to bathe him, to take his temperature, to weigh him. He may doze off, but again he is awakened for some additional hospital measure. About 8 o'clock breakfast is served, at 11:30 lunch and at 4:30 or 5 dinner, thus crowding three meals into from eight and one-half to nine hours of the twenty-four-hour period after nothing has been eaten for fifteen or more hours.

Feeding the Diabetic

How can we logically plan a diabetic diet in the presence of such a routine? There should be intervals of at least six hours between meals, which should be served at 8 a.m., 2 p.m., and 8 or 8:30 p.m., leaving only approximately a twelve-hour interval of fasting. This would be a more logical routine for the patient and more satisfactory. But how can it be accomplished? All the hospital help works on the basis of so many hours a day, so that the ideal routine for diabetic patients would necessitate a double shift, which in turn would mean an increased expense to the patient.

There should be a way to solve this problem and the dietitians and other hospital management

Do you know 3 reasons any better than these...?



For the Nurses and Internes

Corned Beef Supper Salad. Chill and cube Libby's Corned Beef. Mix with chopped hard-cooked eggs, parsley, celery and mayonnaise. Serve in crisp lettuce cups with potato chips and sliced pickled beets



For the General Trays

Corned Beef Toast. Cook and blend Libby's Tomato Juice with butter and flour. Add Libby's Evaporated Milk. Soften toast with part of sauce. Top with Libby's Corned Beef, sliced, and rest of sauce. Sprinkle with grated cheese



For the Private Patients

Corned Beef and Tomato Surprise. Chill and cube Libby's Corned Beef. Add equal parts of cubed cooked potatoes and beets. Scoop out large tomatoes, and fill with mixture. Cover with buttered crumbs, and bake in hot oven

HERE'S to the complete delight of your patients and staff—this trio of dishes that will surely stir the laziest and lustiest appetites in the hospital!

We suggest, for general trays, a piquant, sprightly combination, **Corned Beef Toast**. For your private patients, this new one—**Corned Beef and Tomato Surprise**.

And for the nurses and internes, it's the substantial, nourishing, yet cool and crisp, **Corned Beef Supper Salad**.

With what other meat can you develop three more tempting, economical recipes? Or where could you find three better, more convincing reasons for getting just the sheer joy out of eating?

All of these dishes have an

inimitable, mild flavor, because they're made with Libby's, the original cooked corned beef!

Wholesome, tender, wonderfully fine in texture, Libby's Corned Beef is cooked for you by Libby's chefs. Solid meat, every bit of it, entirely free from bone and gristle.

Because Libby's Corned Beef comes to you, already prepared—edible down to the last ounce—it can be served frequently, at a very moderate portion cost.

Order Libby's Corned Beef, in the No. 1 or 6 pound sizes, from your usual source, today. Remember, too, that Libby packs numerous other fine food products expressly for hospital use!

Libby, McNeill & Libby
Dept. N-31, Welfare Bldg., Chicago



These Libby Foods of finest flavor are now packed in regular and special sizes for institutions:

Red Raspberries
Tomato Purée
Corn, Beets
Hawaiian Pineapple
California Fruits
Spinach, Kraut
Jams, Jellies
Pork and Beans
Tomato Juice
Olives, Pickles
Mustard
Bouillon Cubes
Beef Extract

Peas
Catchup
Chili Sauce
Salmon
Evaporated Milk
Mince Meat
Boneless Chicken
Stringless Beans
Santa Clara Prunes
in Syrup
Strawberries
Loganberries
California Asparagus

groups must find a solution if we are to serve our patients to their best advantage.

In addition to the planning of diets, a dietitian has another big problem—the imparting of her knowledge to the patient. This is no easy task, considering the wide range of clientele. Hospitals to-day are schools for diabetics, and unless a diabetic patient has been properly instructed as to the necessary routine before he leaves the hospital, all the hospital work and the expense have been in vain. It is here that the physician must rely to a great extent on the ingenuity of his dietitian. It is not necessary for the dietitian to teach her patients higher mathematics. It is not essential for the diet calculations to be carried out to a second decimal point. When the dietitian stops to think that the results of all food analyses are only approximate, and that the food she is serving may be away off from the official figures, she will see how foolish it is to figure in decimals. The main thing is to teach the patients the fundamental principles, how to calculate their diets on broad lines rather than make this part of the task so difficult that they will either give up the treatment as a bad job or else feel nervous about their

of careful analyses of foods made for the English Government by McCance and Lawrence. The accompanying table presents a few of the foods I selected from the Atwater-Bryant list, beside each of which I give the McCance and Lawrence figure. The marked discrepancy between the two is readily noticed, the newer figures being virtually one-half or less of the amounts we have used thus far. I was enthusiastic about these new figures at first glance. I felt that here was a boon for the diabetic. When I began to think it over more seriously, however, I saw that such was not the case. First of all, we are not dealing with mathematics but with a sick patient—one who has only a certain amount of endogenous insulin available each day. Let us say that such a patient can tolerate 100 grams carbohydrate, 60 grams protein, 128 grams fat—in all 1,800 calories. If this diet is increased the blood sugar level rises and the patient returns to the former figures. It must not be supposed for a moment that the patient can be fed according to the new dietary scale which, although mathematically correct, would give him in reality twice as much food. Hardly! There is the folly, for it will mean that either we will be prescribing in place of 100 grams of carbohydrate on the old scale only 50 grams on the new, which is equivalent to the patient's tolerance, or else we will be giving 100 grams of carbohydrate on the new scale compensating this additional amount with insulin injections. In reality, there is no gain in this respect.

Too Many Standards

Then there is another feature of the problem. Thus far we have all followed but one standard and have spoken the same scientific language. Now we are likely to have two standards. Rabinowitch in Montreal has already started the ball rolling, and it will bring a tremendous confusion into our literature.

I want to mention once more the diabetic children. In this field, I feel, lies our greatest progress in the treatment of diabetes, for here every bit of expended energy counts. These children have a long life before them. It is through them that our work will progress, for they are and will be the messengers of the gospel through whom the public at large will be instructed. They should have every opportunity to improve their condition so as to be able to live a full and useful life, for with their increased mental endowment and the self-imposed discipline under which they are growing up, they will become men and women who will reflect credit on dietetics at large.¹

COMPARATIVE FOOD VALUES (AVAILABLE CARBOHYDRATE, PER CENT)

Food	Atwater-Bryant	McCance-Lawrence
Apple	14.2	7.7
Apricot	12.6	4.6
Blackberries	10.9	4.9
Cherries	16.7	5.7
Cranberries	9.9	1.0
Almonds	17.3	6.5
Brazil nuts	3.5	2.5
Chestnuts	42.1	29.2
Peanuts	24.4	11.4
Walnuts	11.7	5.0
Artichoke	16.7	1.1
Asparagus	3.3	1.5
Cabbage	5.6	1.2
Carrots	9.3	5.9
Cauliflower	4.7	1.3
Celery	3.3	1.0
Lettuce	2.9	0.7

calculations when they do not come out exactly right. In this way the dietitian can do much indeed to lessen the difficult task of the patient.

To reveal some of the fallacies of splitting hairs in calculating diets, I shall point out two types of analyses. For many years we have followed the official figures as supplied us by our Government, analyses made by Atwater-Bryant. This has been our bible and has given us a general uniform standard. Quite recently I procured a publication

¹Read at the tenth annual meeting of the Ohio Dietetic Association, Cleveland, April 28, 1931.

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Conducted by MICHAEL M. DAVIS, Ph.D.
Director for Medical Services, Julius Rosenwald Fund, Chicago

A Pay Clinic in Philadelphia and the Patients It Serves

THE expression, "Only the rich and the pauper receive the best medical care," is a half truth that has gained considerable credence of late. The implication of the statement and the burden of voluminous press criticism are that persons of moderate means, the great so-called middle class, suffer because the best medical care is beyond their financial reach. They pay their way and, when unable to do so, prefer to do without rather than to accept a service that is charitable. It is doubtful if the statement is true for the usual illnesses; probably they are treated better than they ever have been, but for many other illnesses the expense often is large.

Good medical care never can be classed as a luxury; it should be made available to all for what they can afford to pay. Part of the present cost is of course the lowered purchasing power of the dollar—one forgets that now good shoes cost three times what they did twenty-five years ago—but the main reasons for increased costs of hospital care are the development of specialization, the change in custom to hospitalization for the care of many cases and the array of laboratory tests that are so helpful to accurate diagnosis. All these are improvements in service, demanded by the patient and incidental to progress.

No one knows better than the family physician that if an extensive diagnostic procedure, an operation or a long period of hospital and nursing care becomes necessary, many families are unable to meet the cost without running into insurmountable debt. The small store owner, the clerk, the high-class mechanic and the underpaid professional person, such as the teacher, are the ones who feel the burden particularly. For some time past the doctor has in effect favored these patients, reducing his fees for them, helping them to avoid expensive procedures or asking reduc-

tions for them when such tests became essential. No doubt the family physician will continue to care for the majority, but the pay clinic promises to care for an increasing number of these persons.

The pay clinic is an organization composed of doctors representing a number of specialties. Its aim is to provide medical service at approximate cost, including pay for the physician. As a rule no charge is made for "rent" of the premises or for the equipment used, but in consideration of this and of the fact that service is at cost, admissions are limited to persons whose incomes are such that they are considered unable to pay private medical fees for similar care. Cornell Clinic, opened in 1921, is the best known of such organizations and its progress has blazed the way for others.

How Patients Are Accepted

In September, 1928, the Pennsylvania Hospital opened its pay clinic. The only notice of this opening was a form letter sent to some 8,000 physicians in and about Philadelphia and throughout the southern half of New Jersey, to inform them of the establishment of a consultation service as part of the pay clinic. Admission to these clinics is limited to members of families whose incomes are less than a specified amount, the scale varying with the size of the family group. Eligibility is determined by an expert skilled in such investigations. Patients from family groups earning more than that of the scale adopted are referred to private physicians. Patients are accepted for treatment upon personal application or upon reference by physicians or social agencies.

There are two clinic sessions each week: on Tuesdays from four to six and on Fridays from six to eight. Clinics are held in surgery, gynecology, orthopedics, urology, general medicine,



There's eye and appetite appeal in **SAVORY TOAST**

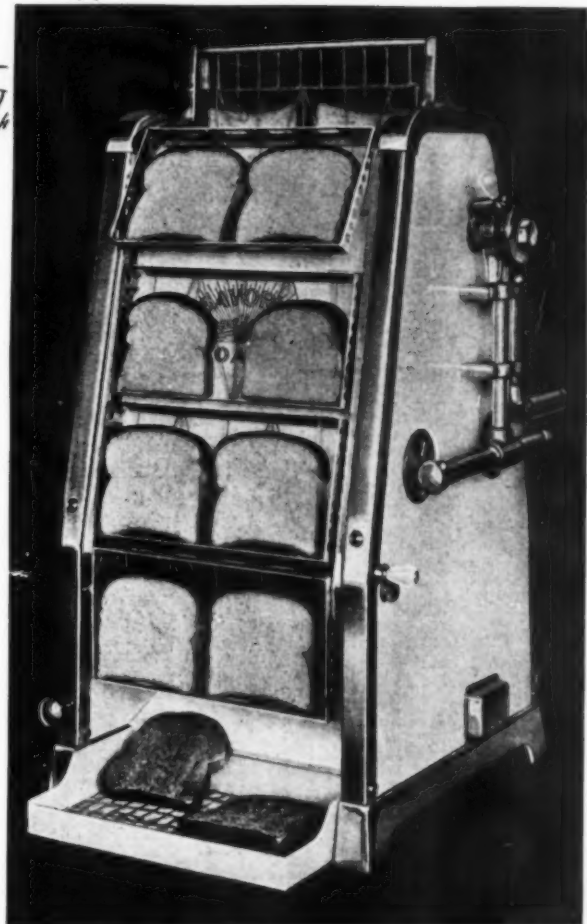
HAVE you ever noticed how often ordinary toast seems to carry a "round-trip" ticket? It goes out to the patient and *comes back to the kitchen*. Not so with Savory toast . . . every slice is soft-centered, evenly browned . . . patients welcome its crisp freshness.

Gas makes better toast cheaper

Here's why Savory toast is so appetizingly different: Moist gas heat first *cooks* the bread . . . imparts the delectable soft center. Then *quick*, radiant heat seals the goodness in . . . carmelizes the moist sugar on the surface. Savory *radiant gas* Toasters cost much less to operate. Using cheap, dependable gas, they provide a continuous production of better toast for only $\frac{1}{2}$ c to $\frac{3}{4}$ c an hour. And they require less attention while operating, too. Just put in the bread. No need to watch it, nor to be there when it's toasted. A Savory empties the finished toast into a tray at the bottom.

Savory Toasters are first choice among hospitals now building

The majority of hospitals now under construction are installing Savory Toasters. The reasons for this overwhelm-



This popular, hospital-size Savory Toaster makes one slice of better toast every 12 seconds at a cost of only $\frac{3}{4}$ c to $\frac{3}{4}$ c an hour.

ing acceptance are also the reasons why so many hospitals now operating are replacing their obsolete toast-making equipment with Savory Toasters. Let us send you the names of some of these hospitals and complete information about Savory Toasters. Just fill out and mail the coupon.

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neuropsychiatry, pediatrics, dermatology, eye and ear, nose and throat diseases. These clinics are staffed by fourteen physicians who are paid according to the number of sessions each attends. Various forms of physiotherapy are available, and the clinical, physiological and x-ray laboratories of the hospital are freely used.

Three registrars enroll the patients. Although they do not belong to the social service department of the hospital, the group is headed by a medically trained social worker and certain applicants are routinely referred to social service. The duties of the registrars are: to collect from every new patient accurate identification data; to check the name of each applicant in the patient index file to make sure that there is not a previous admission and medical record; to determine facts that will disclose the family income and responsibilities; to gather information that will determine to what clinic the patient shall be sent. It is necessary also to see frequently certain former patients in order to rerate them financially or make certain adjustments regarding free admission or medicines. The registration desk must be covered daily except Sunday from 8:30 a.m. to 6 or 8 p.m. Sometimes only one registrar is necessary, but at other times all three are on duty and they may find it necessary to ask for help in order not to delay the patients. The actual inquiry takes ten or fifteen minutes, and it is unusual to find the benches for waiting patients crowded.

Most of the individuals served by the hospital are of the lowest economic classes who (particularly in this year of financial stress) are unlikely to have any steady occupation. It is exceptional to have patients applying to the pay clinics who are believed able to pay for private care. If such patients do apply, they are refused admission. Such persons have no right to facilities intended for patients who cannot afford private fees.

What the Patients Paid

During the first eleven months of 1929 there were 518 new patients who made 2,448 visits to the pay clinic; during 1930 there were 2,538 visits made by 418 new patients. The consultation service and its use by physicians for their patients are of particular interest. During the first year 152 patients were sent for investigation; 100 for general consultation, 23 to the medical subdepartments such as asthma, cardiac and diabetes, 6 to pediatrics and 23 to the specialty clinics. These patients were referred by 90 physicians, 24 sending more than one patient. Six patients were sent by life insurance or industrial physicians. All the others (146) came from the private practice of the referring physician.

During the eleven months of 1929, of the 518 new patients, 109 (21 per cent) were referred for consultation, 32 to special clinics and 77 for general investigation. These 77 patients paid a total of \$1,967.50, of which \$822.50 was for x-rays, electrocardiograms and basal metabolism tests, the remaining amount, \$1,145, covering the charges for visits to physicians and laboratory work other than that already enumerated. The cost to each patient averaged \$25.55. In the year 1930, of the new patients, 130 (31 per cent) were sent for consultation.

Actual Instances of the Clinic's Service

Short accounts of actual cases picked at random from the files serve to show what was done for the patients and the small relative cost.

Mr. Thompson was a white man of twenty-eight years with a wife and two children. He earned \$30 a week as an upholsterer. He was referred to the clinic because of difficulty with vision, which he had had since he was seven, and indigestion. He visited the internist, the neurologist, the ophthalmologist and the syphilographer. The urine and spinal fluid were examined. He had a blood Wassermann and gastric analysis and x-ray examinations of the heart and of the gastro-intestinal tract. The examinations resulted in a diagnosis of luetic choroiditis, congenital lues and functional digestive difficulty.

Mrs. Watters was a married woman of twenty-three years without children whose husband earned \$28 as a chauffeur. She was referred because of a "cold" of three months' duration, inflammation of one eye and an ulcerative eruption of the legs of five years' duration. She visited the internist, the surgeon, the ophthalmologist and the dermatologist, and had examinations of the urine, sputum and blood, a blood Wassermann and x-rays of the lungs and of the legs (for possible bony involvement). The resulting diagnosis was one of advanced pulmonary tuberculosis, severe lupus vulgaris and probable tuberculous iritis.

Mrs. Wilson was a white woman of forty-two years with one child. Her husband earned \$30 per week in a chemical factory. She was referred because of attacks of indigestion occurring a year or more previous to her admission. She was examined by the internist, the surgeon and the rhinologist. She had a urine examination, a blood count and a Wassermann, blood urea nitrogen and sugar and Van den Bergh, a stool examination, a gall bladder drainage and an x-ray of the gall bladder. Her illness was diagnosed as chronic cholecystitis, probably with stone.

Mr. Mason was a single man of twenty-three years employed as a grocery clerk at \$22 a week.

The PLAGUE DOCTOR

*—he wore a false nose and
felt the pulse with a wand*

THE PLACE—London. The year, 1665—the time of the terrible Great Plague!

A queer figure, shrouded from head to foot in a leather gown, prowls about the deserted streets. His enormous false nose is filled with smoldering herbs, which fumigate the air he breathes. He is the plague doctor—a typical physician of the times. He has never heard of germs; never dreamed of disinfection.

Indeed, the whole medical world shared his ignorance until 200 years later. Not until then did science discover that disease and infection are caused by germs. Now, medical science wages an unceasing war upon germs, and one of its oldest and most effective weapons is "Lysol" Disinfectant.

The purity of "Lysol"; its neutrality; its freedom from free alkali and from harmful and unpleasant impurities; its continued germicidal potency in the presence of even large amounts of organic matter; its uniformity in composition, appearance and color; its non-toxic qualities; and its ability to disinfect without corroding instruments or harming rubber—these have made "Lysol" a standard among leaders in the medical profession here and abroad.

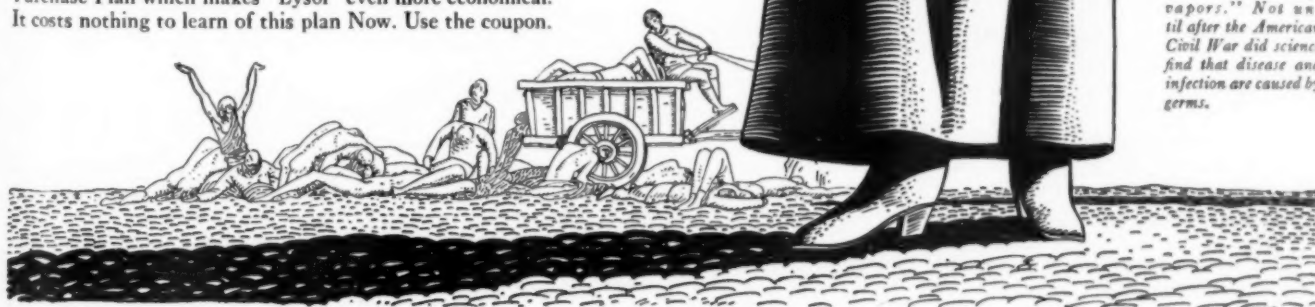
Economy at \$1.50 a gallon

Hospitals find "Lysol" the most economical disinfectant. By being able to purchase it at \$1.50 a gallon in 10-gallon lots, they buy it at cost, and obtain the highest quality disinfectant at a price comparable with that of inferior imitations on the market.

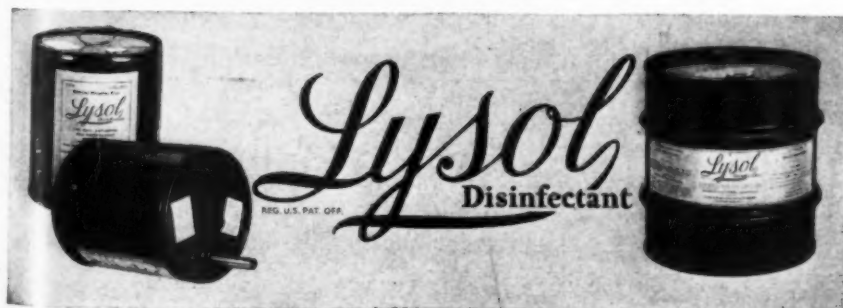
"Lysol" Disinfectant is ready to ship to hospitals in one-gallon cans and in 5, 10, 30, and 50-gallon drums. If you want to provide for your disinfectant needs for the next twelve months, ask us for information regarding a special Yearly Purchase Plan which makes "Lysol" even more economical. It costs nothing to learn of this plan Now. Use the coupon.



The Plague Doctor of 1665 thought sickness was caused by "miasmas" and "corrupt vapors." Not until after the American Civil War did science find that disease and infection are caused by germs.



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Your Name

Title

Your Hospital

City State

He had had, during the three months previous to his admission to the clinic, a number of attacks of severe upper abdominal pain and for two months a constant discomfort in the upper left abdomen. He visited the internist, rhinologist and the urologist, had a urine and stool examination, a Wassermann reaction and a blood count, a cystoscopic examination with pyelography and an x-ray of the gastro-intestinal tract. The diagnosis was that of functional digestive difficulty, ptosis of the transverse colon and a small renal calculus.

All such patients, who are referred for diagnosis, are routinely returned to their physician at the completion of the investigation and a letter is mailed to the doctor setting forth the physical and laboratory findings, a diagnosis and suggestions for treatment. Some of these patients, perhaps one tenth, are returned to the clinic for any special treatment that may have been advised, but no such patient is under any circumstance accepted for treatment unless his physician so advises.

The clinic is not large but it has had a satisfactory growth considering that it has not been advertised. The great handicap at present is the lack of private rooms or semiprivate rooms, and the inability to offer in-patient service of this character. Both the patient and the physician are keenly aware of this. When bed care is necessary, treatment can be completed only for those patients who can be admitted to the general wards. It is the aim of the clinic to complete the treatment of every patient accepted for medical care, and the success of this effort will be shown in ensuing years by a constantly increasing proportion of visits per patient.¹

How O. P. D. Work Has Developed in a Southern County Hospital

By LYNDA BRAY

Superintendent, Athens General Hospital, Athens, Ga.

The out-patient department of the Athens General Hospital in Athens, Ga., a university town of 20,000 population, was started in 1924, four years after the hospital was established. The hospital was built and equipped out of funds donated by members of the community, but a year after it was opened it was bought by Clarke County, of which Athens is the county seat. The building accommodates sixty-five patients.

The first home of the clinic was in the basement of the nurses' home since there was no space in the hospital building. Clinics were held three days a

week with surgical, medical, pediatric, obstetrical, eye, ear, nose and throat, and venereal disease departments. Certain days were used for certain clinics. But this arrangement made cooperation difficult for the doctors who gave their services free. In 1926 they decided that they could attend more regularly if all the clinics were held on one day. Tuesday, from 12 to 3, was made clinic day. The clinic staff was reorganized and the different doctors were placed on different services.

After this reorganization the attendance of the out-patient department increased to such an extent that more ample quarters were needed. One end of the hospital was remodeled for out-patient department use. The arrangement provided a room for each service, with waiting rooms for both Negro and white patients.

The general admission fee is ten cents. Fifty cents is charged for salvarsan in the venereal disease clinic which always has the largest number of patients. Most of the patients who come are able to afford this charge; the Red Cross pays for those who cannot.

Attendance has more than doubled since 1924 as the following tabulation shows:

Year	Number of Patients
1924	795
1925	900
1926	1,081
1927	1,089
1928	2,242
1929	1,688
1930	

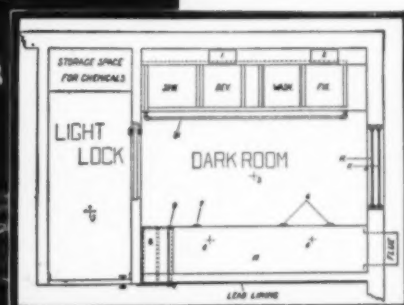
The large increase in 1928 was due to the extensive work in Athens carried on during that year by the child welfare workers of the Rockefeller Institute.

Records are in charge of the operating room supervisor with students as assistants. A complete record is made of the social and family history as well as the physical history of each case. The clinics are fortunate in having the actual work of record keeping taken care of by the secretary of the local Red Cross. She is of special value in this job because of her knowledge of the social-economic conditions in Athens.

Out-patient work at the Athens General Hospital is of particular interest because it is so closely integrated with other community work. The participation of the Red Cross secretary just mentioned is one example. The cooperation with the child welfare work of the Rockefeller Foundation is another. Relations with the city board of health are cordial. The three public health nurses who work under the health officer send in many patients.

¹Summarized from the 1929 and 1930 reports of the Out-Patient Clinics of the Pennsylvania Hospital, Philadelphia, by Samuel Bradbury, M.D., medical director.

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TOO much thought cannot be given to the layout of the x-ray processing room. For here the efficiency of x-ray exposure technic is helped or hindered. Proper planning of details saves steps, simplifies handling of films, and conserves the technician's time; these are matters of real economy.

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Director, Grasslands Hospital, Valhalla, N. Y.

Buying Satisfactory Cleaning Materials Economically

CLEANING operations performed in every hospital are largely concerned with the washing of painted surfaces, the cleaning of tile and enamel, the care of marble and the mopping of floors. With the increased use of two-tone paint, colored tiles, rubber floorings, fancy terrazzo and other utilitarian and decorative surfaces, the choice of a satisfactory and economical material becomes an important issue.

A maintenance cleaner must of necessity (1) give cleanliness quickly and thoroughly; (2) clean without scratching, dulling or lining washed surfaces; (3) clean without bleeding or fading colored surfaces; (4) give surfaces that are grease-

less and do not attract dust; (5) be economical.

With these factors as a working basis, let us analyze the nine quart jars of cleaning materials in Photograph No. 1.

Each of the jars contains an exact pound of a different maintenance cleaning material. It is highly probable that the representatives of each of these nine cleaning material manufacturers would claim that their cleaner met all of the above mentioned requirements, especially that of economy. Yet let us look for ourselves. A pound of the cleaning material on the right is about one-third the volume of a pound of the cleaning material at the extreme left. A handful of the



Each of these quart jars contains an exact pound of a different maintenance cleaning material.



This picture shows the same cleaners to which equal parts of water have been added; the solutions have stood for ninety days.

"Little Sunshine"

is due to CHANGE *his* Disposition



"LITTLE SUNSHINE" is a typical convalescent. Can't be pleased. Loudly critical. All his friends and relatives hear your beds, your food, your nurses bawled out.

But he's going to change! For the bedlinens that to his sensitive hide are "rough and scratchy," are being replaced with Pequot! And at least *one* of his pet peeves will be gone forever.

* There *is* a difference in the feel of sheets. Even non-convalescents can tell. There's a softer, smoother touch

to a Pequot, that your fingers gratefully sense. It's in the finish—and it *lasts*. Your laundry manager welcomes Pequots; they eternally do him credit.

Of course, you know how Pequots *wear*. More stubbornly and durably than others. Fewer replacements. Less expense. A better annual linen statement. Which is as comfortable to you as Pequot sheets are to convalescents!

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From painting by Murillo

A patron saint of nursing and little children, the heroine of some of our most beautiful legends, Elizabeth of Hungary has left a record that fairly sings of greatness of heart, simplicity of spirit and untiring energy in the cause of charity.

The more wonderful her story, startling, almost unbelievable, when we read that she died at the age of twenty-four—just past the threshold of young womanhood—warned out too early by an arduous life passionately devoted to the poor, the humble, the weak, the outcast.

Saint Elizabeth in history; but "die liebe Frau Elisabeth", Mother of the Poor, in the hearts of the multitudes who have been touched by her life.

WILL ROSS, INC., WHOLESALE HOSPITAL SUPPLIES
779-783 No. Water Street Milwaukee, Wisconsin

one cleaner is about half a pound, worth one and one half cents at market price. A handful of the lighter material at the extreme left is less than a sixth of a pound, worth one cent at market price. Since maintenance cleaning materials are used by volume, the only equitable basis upon which to determine their value is to ascertain the amount of satisfactory cleaning that a pound of any particular material will do.

Consideration here has been limited to dry powders only. Any of the materials pictured could be bought in solution form. But when maintenance cleaning materials are bought in solution form, the buyer is, of course, paying freight and handling charges on a large percentage of water, as well as paying for the water itself.

What a Cleaner Consists of

A maintenance cleaning material is composed of a mixture of a sanitary cleanser, a small amount of lubricant and an abrasive material. Abrasive is an unfortunate choice of wording in this connection, as the materials in a good maintenance cleaner should never scar, scratch or abrade. Common usage, however, has tagged the mechanical element in a maintenance cleaning material the "abrasive."

These incorrectly termed "abrasive" materials run all the way from light, fluffy, feather edged volcanic ash to true abrasives, such as ground up sand, marble dust and pumice. The maintenance cleaners with a minimum of volume per pound are obviously ones having heavy "abrasive" elements. The amount of mechanical injury done by any maintenance cleaning material is of course in direct proportion to the kind of "abrasive" it contains. When the "abrasive" is light and feather edged, even glossy painted surfaces can be cleaned scores of times without becoming dulled or discolored.

In solution, heavy "abrasive" materials in maintenance cleaners quickly sink to the bottom of the container, while light "abrasive" materials remain in suspension for various lengths of time. Since the "abrasive" element of any maintenance cleaning material is insoluble, cleaners with light "abrasives" give an efficient solution. This is true because the light abrasive is picked up by the mop or sponge, aids in the cleaning operation and is harmless to the washed surface.

Before the exact ratio of efficiency between any of the nine materials pictured can be determined, accurate figures should be obtained as to the amount of cleaning that can be satisfactorily done with a handful of cleaner and with a pound of each cleaner. It must be borne in mind, however, that the workers ordinarily doing cleaning as a rule use more material than is used in laboratory tests. And a handful to them is a handful,

WHEN IT COMES TO REFRIGERATION

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This matter of hospital refrigeration is not a thing for guess work. It requires experts to analyze and take care of a hospital's particular refrigeration needs, just as it takes men with skill and experience to know the ills and treatments of the human body.

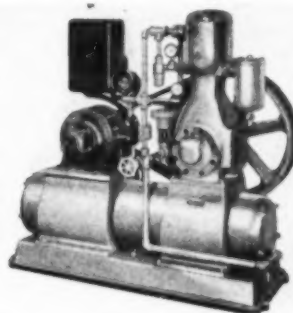
For that reason we urge you to consider Lipman when you come to refrigeration. A Lipman machine, you know, is never sold as such. We require that it be installed by Lipman engineers so that the inherent fine quality of the machine is extended to every part of the refrigeration system.

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We can afford to wait for your decision for we know in advance just what it will be.

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SPECIALISTS IN
NURSES' APPAREL AND HOSPITAL GARMENTS

whether it is a half, a quarter or an eighth of a pound.

Photograph No. 2 shows equal parts of water and the same cleaners shown in Photograph No. 1 after the solutions have stood for ninety days. Unfortunately the odors given off by some of these solutions cannot be photographed. Hospitals, where odors should at all times be pleasant, will find this test of a maintenance cleaning material of more than passing interest. Only those maintenance cleaners should be used that leave washed surfaces odorless.

The jar at the extreme left of Photograph No. 2 contains an entirely dry mixture somewhat similar in content to dry and decayed wood which crumbles at the touch into fine particles. While the jar on the extreme right of Photograph No. 2 shows little evidence of the cleaner having gone into solution, a considerable quantity of water is floating on a solid bed of material similar in content to fairly fine white sand.

The intervening jars show variations and mixtures of these two conditions in varying degrees. In all of them except the first jar, there is a distinct settling out of the so-called "abrasive" material. In some the term abrasive is properly applied, since the materials that have settled out are harsh to the touch. In several of the jars there is a layer of congealed material, floating in some and submerged in others, which is evidently rancid soap.

Suggestions for Buying

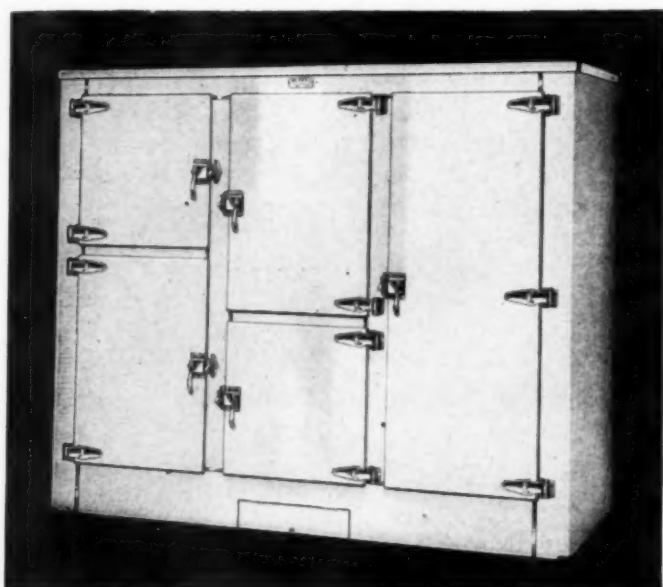
In the buying of maintenance cleaning materials, there are certain specifications that can be intelligently demonstrated in the hospital superintendent's own office. The superintendent can roughly estimate the weight of the "abrasive" in a cleaner by comparing it on a volume basis with the material he is now using. Actually weighing both samples is of course more accurate and more satisfactory. The more volume a pound of cleaner occupies, the lighter is its abrasive and the further it will go in actual use.

Washing a finely polished surface is an excellent way to test a cleaner. A desk top will do provided the material under consideration has a truly soft and flaky abrasive. The washed area should then be examined for scratches or scars. Such an examination will also determine whether the area has been left free from grease or soap film which would in turn attract and hold dust and soil.

Only actual use will show whether a cleaner will bleed the colors in rubber tile or yellow white painted surfaces.

It is always good business for the superintendent to find out all that he can about a maintenance cleaning material before he standardizes upon it

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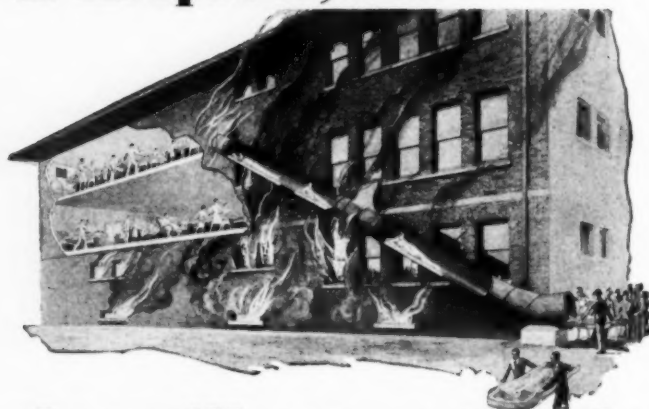
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or buys it. There are certain obvious specifications that a maintenance cleaner should possess.

1. The "abrasive" element should be light and fluffy and it should break down under pressure. Certain volcanic ash best meets this requirement as determined by the American Hospital Association committee on cleaning standards.

2. The lubricating element should be just enough to give the proper "glide" to the mop or sponge. An excess of grease or soap leaves an unrinsed film on washed surfaces.

3. The cleansing element should be efficient yet free rinsing, and of such low alkalinity as to be harmless to colors, rubber and paint.

To purchase maintenance cleaning materials calls for the same expert buying that the superintendent puts into obtaining other equipment and supplies. Once a cleaner is purchased, actual cleaning results should be carefully and regularly checked under average working conditions.

A Modern Plumbing System in a Modern Building

"Up to the minute in every detail" is the phrase that best describes the Oscar Johnson Institute and McMillan Hospital of the Washington University Hospitals and Allied Clinics, St. Louis. Especially does it describe the sanitary facilities of the building, which is, according to the *Plumbers and Heating Contractors Trade Journal*, generously equipped with modern science laboratories and a wealth of fixtures and apparatus.

That the plumbing system is complete, is shown by the following description which appears in the *Journal*.

The new fifteen-story hospital building has four house drains connected to the street sewer. One 8-inch main soil and storm water drain takes all connections from the fixtures, stacks and down spouts above the ground floor except the chemical wastes. A 6-inch basement drain connects to all fixtures on the ground floor except the kitchen equipment.

A 4-inch basement drain connects independently to the basement kitchen equipment and is provided with openings for the connection of pressure steam to melt and blow out accumulations of grease. There also is one 4-inch acid waste drain.

This arrangement makes two low and two high drainage systems, the low systems for the ground floor being equipped with main traps having backwater valves as integral parts. For the upper floors some fifteen 4-inch soil stacks extend all the way to the roof, besides which some smaller 2-inch and 3-inch waste stacks were required.

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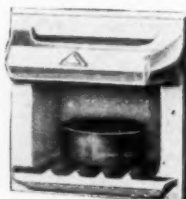
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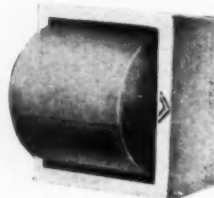
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NESCO Hospital Utensils can withstand more abuse, are easier to keep sanitary, and will wear 4 to 10 times longer than coated ware.

It is intelligent economy to purchase Nesco Utensils for these advantages. Nesco Monel Units eliminate the costly replacement problem, in addition to being the safest and most modern type of hospital utensil.

Illustrated above is one of the three sizes of Nesco Sponge Bowls—4 3/4" x 4 1/16", 6 3/8" x 5 13/16", and 7" x 6 7/16". Write for catalog No. 51, fully describing the entire Nesco Hospital line, and for name of nearest distributor.

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Sanitary
Sturdy, Strong
Resist Denting and
Scratching
Clean-Looking
Easy to Clean
Non-Corrosive
No Coating to Wear Off
Seamless and Solid

NESCO



There are about five 4-inch inside leaders for roof water. The main soil stacks have 4-inch or 3-inch vent stacks accompanying them. There are two 1 1/2-inch waste stacks for drinking fountains with 1 1/2-inch vent stacks, each fountain having a P trap and vertical continuous vent.

All underground drainage pipe is extra heavy cast iron with lead-caulked joints and is tested before being filled in with a head of water 30 feet high. All drainage and vent lines above the basement floor, except chemical lines, are galvanized screw pipe with recessed drainage fittings.

For the basement floor alone there are twelve water closets, twenty lavatories, six showers, twelve dental lavatories, a number of sinks, urinals and floor drains, and a big kitchen with full equipment of the hotel type, including refrigerators and ice boxes.

Various machine room floor drains, elevator pit drains and other drips make a sub-basement system which is drained to a sump. The sump is built with substantial concrete and brick, provided with ladder steps. It has a cast iron top frame and cover supporting an electric-driven ejector pump operated by float and rod and having a capacity of twenty-five gallons a minute against a 30-foot head. The sump discharge pipe runs to the higher drainage system, which is customary.

Expansion Is Provided for

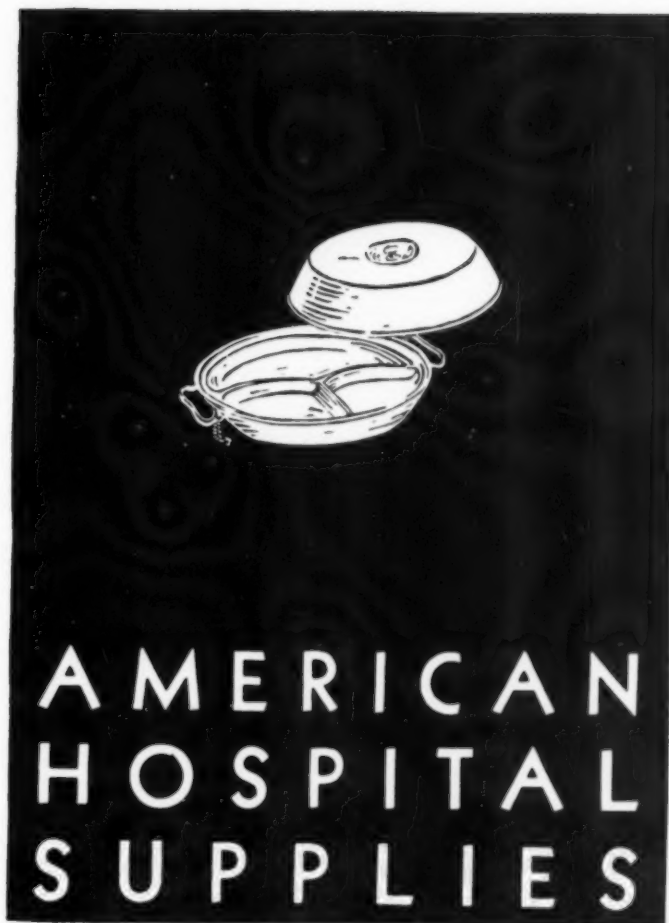
The four house drains running to the street sewer are each provided with a fresh air inlet which were connected before each drain passed out through the foundation wall. The four house drains run out of the building in one piping group and the four fresh air inlets are connected into a 6-inch header, the header having a 6-inch inlet extension to the street near the sidewalk curb. The fresh inlet box is provided with a grating and a deep dirt pocket.

The water supply is brought into the building through a 4-inch cast iron service and is supplied with a meter. A 4-inch galvanized iron main runs across the basement ceiling to connect with the house pumps. The two electric-driven centrifugal house pumps have a capacity each of 150 gallons a minute delivered into the house tanks in the penthouse at roof.

The bases of the house pumps are provided with cork mats set tightly in a concrete foundation and the pump supply and discharge lines are equipped with inserted appliances to eliminate vibration. The pumps have both automatic float controls from the house tanks and separate manual controls. And they are cross connected so that either or both may be in operation as desired.

A 3-inch discharge riser runs to the house tanks. The 5,000-gallon house tanks are so arranged that the valving out of one tank will not

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interfere with the other, and the operation of either pump will fill both tanks.

A 3-inch down supply riser runs to the hot water heaters and storage tanks in the basement. A 4-inch down supply riser from the tanks carries cold water supply to all floors below. A 4-inch drop riser from the tanks feeds the fire line system. The fire standpipe system also has several Siamese street connections with the usual check valves and automatic ball drips.

There are two hot water storage tanks on the ground floor with a capacity of 750 gallons each and they are extra heavy tested to 150 pounds hydrostatic pressure. The tanks are connected so as to operate as one unit or separately. A hot water supply riser runs to the top of the building in the usual manner and is distributed for connections to all hot water drop risers to form a circulating system. At the high point of the hot water system an air relief pipe is extended up to and over the house tanks. Expansion loops are provided about every fourth floor in the hot water risers.

All branches from the hot and cold water risers are made with nipple and elbow to give a slight swing. Expansion has been considered in all cases for hot and cold water supplies. The entire system of water supply is controlled with valves for all risers and branches from risers so that each group of fixtures or any single fixture may be separately shut off.

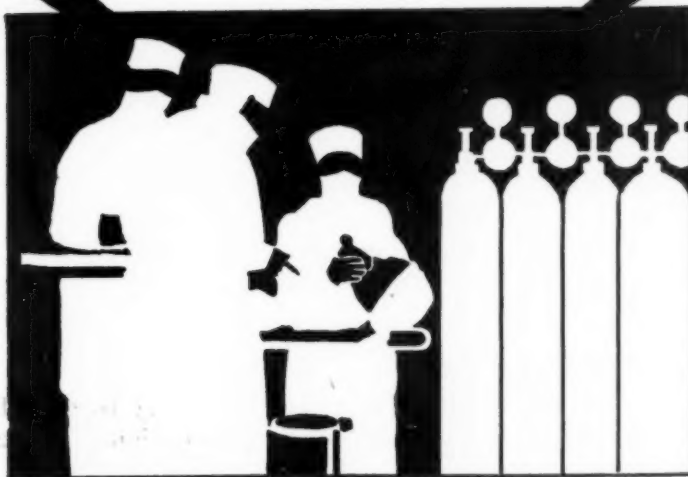
A 3-inch gas service has been brought into the building from the street main and extended throughout the building to numerous laboratory and operating rooms. The gas system was tested in sections as installed and then submitted to a final test when the installation was complete.

Two Systems of Air Pipe Work

There are two systems of air pipe work, one for compressed air and one for vacuum. In practically all instances for scores of laboratory rooms, the three lines of gas, air and vacuum have had to be extended to tables and appliances. The equipment includes several air compressors and storage tanks and several vacuum pumps.

Each hot water storage tank is equipped with a copper coil steamheated generator with capacity to heat 1,000 gallons of water per hour from 50 to 180 degrees. The hot water storage tanks are furnished with pressure relief valves, angle thermometers and temperature regulators. All hot water supply passes first through water softeners, two zeolite softeners being provided, each 5 feet in diameter and 8½ feet high. There is also one steel regenerating tank, 4 feet by 4 feet, and a full back-wash control device with drains.

There are numerous sterilizers throughout the building, each provided with hot and cold water,



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waste and vent connections. All sterilizers have separate vent stacks and indirect waste connections to the plumbing system, usually through trapped floor drains.

Several floors of the building are used for clinical laboratories, animal cages and like purposes. Each clinical laboratory has a soapstone table and acidproof sink. Each sink has hot and cold water faucets in combination with spout faucets. And each laboratory is supplied with cocks for compressed air, gas and vacuum.

Throughout the building there are scores of separate plumbing fixtures, including showers, water closets with flush valves, sinks for clinic rooms, sinks for utility rooms and sinks for kitchenettes. The sinks generally are of acid resisting enameled iron. There are also wash-up sinks for doctors and surgeons, fitted with knee control mixing valve fitting.

There are numerous janitors' slop sinks throughout the building, each janitor's closet having a floor drain and trap. There are several nurses' sinks and numerous surgeons' lavatories in the operating and treatment rooms. These latter are of vitreous china with instrument trays, gooseneck spouts and knee controls for water supply and waste plug.

The regular toilet rooms throughout the building comprise the usual water closets, lavatories and urinals. And there are several infants' baths and numerous regular bathtubs. A great many of the patients' private rooms are provided with individual bathrooms.

Caring for Lobby Rugs in the Hospital

Lobby rugs should be given careful attention, says F. U. von Schrader in the *Hotel Bulletin*.

To care properly for lobby rugs, Mr. von Schrader points out, they should be turned every few months so that the wear will be evenly distributed. The furniture should be moved at intervals so that the indentations produced by legs of davenports and chairs will not become permanent.

There should be a cushion under every rug and carpet, he says. Its natural resilience acts as a shock absorber for the many sharp heel blows, preventing the rug from being ground against the hard floor. Small indentations on the top of the cushion also provide air space under the rug, naturally increasing the suction and making the vacuum cleaning correspondingly more effective. The yielding cushion deadens the sound of footsteps and at the same time gives the carpet thickness and softness.